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Graphite

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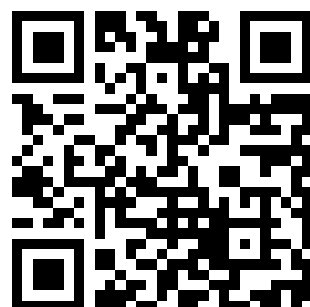
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JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED 1827 Jersey City, N. J., U. S. A. INCORPORATED 1868

**Miners, Importers and
Manufacturers of Graphite,
Plumbago, Black Lead**

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WILLIAM G. BUMSTED EDWARD L. YOUNG
J. H. SCHERMERHORN HARRY DAILEY
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PHILADELPHIA SALESROOM . . . 1020 Arch Street
SAN FRANCISCO SALESROOM . . 155 Second Street
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BOSTON OFFICE . . 347 John Hancock Building
ST. LOUIS OFFICE 501 Victoria Building
BUFFALO OFFICE, 409 Erie County Savings Bank Bldg.
ATLANTA OFFICE 225 Peachtree Street

EUROPEAN AGENTS

Graphite Products, Ltd., 218-220 Queens Road, Battersea, London

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FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS

ALFREDO J. EICHLER, *General Agent*

Agent for Argentine, Uruguay and Paraguay

E. H. Blanchard, 185 Paseo Colon, Buenos Aires

Agent for Chile, Peru, Ecuador and Bolivia

Enrique Seller, Calle Huerfanos 761, Santiago, Chile

Agent for Brazil

M. V. Powell, Rua Directa 7, Sala 68, São Paulo, Brazil

CUBAN AGENT

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS

William Croft, Room 424 Lonja del Comercio, Havana

Agent for Porto Rico, Virgin Islands and San Domingo

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS

H. Glyde Gregory, Royal Bank Building, San Juan

LATIN-AMERICAN AGENTS

FOR DIXON'S AMERICAN GRAPHITE PENCILS, ETC.

National Paper and Type Company, 31-35 Burling Slip, N. Y.

With Branch Houses in Mexico, Cuba, Peru, Argentine, Uruguay, Venezuela, Porto Rico and Colombia

CANADIAN AGENTS

FOR DIXON'S AMERICAN GRAPHITE PENCILS, ETC.

A. R. MacDougall & Co., Ltd., 468 King St., West, Toronto, Ontario, Can.

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS

Canadian Asbestos Company, Montreal, Quebec, Can.

Pencils and flannel suits

You *could* wear a white flannel suit in zero weather—but why should you? And why should you use in your work any pencil other than that precisely suited to your requirements?

DIXON'S ELDORADO

"the master drawing pencil"

offers, among its 17 degrees, a pencil that fits your individual needs, just as if it were made for you—a pencil so responsive, so delightful to use that you will notice at once a great difference in the ease and speed of your work. 17 degrees—9H (hardest) to 6B (softest); HB (medium) for general work. Whichever grade suits you now will suit you always, for each degree is always uniform.

Write now on your letter head for free full-length samples—also our grade chart showing the uses of the 17 degrees. Please state the nature of your pencil work and your dealer's name.



Joseph Dixon Crucible Co.

Dept. 190-J

Jersey City, N. J.

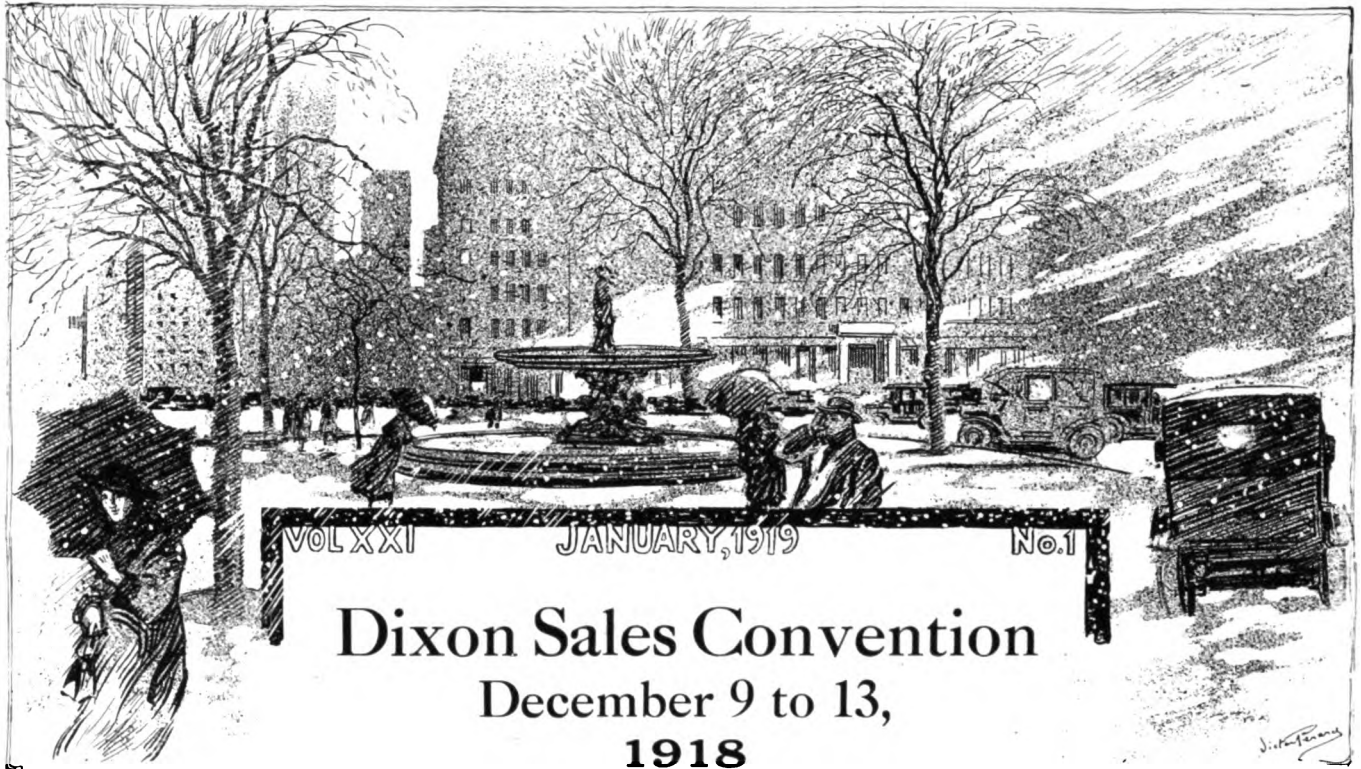


ESTABLISHED 1827



Canadian Distributors

A. R. MacDougall & Co., Ltd., Toronto, Ont.



MONDAY, December 9th, the First Dixon Sales Convention opened, with Dixon salesmen from every District Office present. On account of the number of subjects to be discussed, meetings for the various departments were held simultaneously.

Monday, the first day, was spent by the salesmen in visiting the various factories and in getting acquainted with each other, and on Tuesday the departmental sessions opened.

The Lubricants Department covers so many fields that it was necessary for them to have sectional meetings. There were going on at the same time meetings on Graphite Automobile Lubricants, Power House Lubrication, Railroad Lubricants, and General Mining Conditions. There were also special meetings with reference to Dixon's Graphite Brushes, Boiler Graphite, Pipe Joint Compound, Electrotyping Graphite, Solid Belt Dressing, and others.

Papers on previously assigned subjects opened the discussions, which were open to all without restrictions of any kind. Sales demonstrations, in which one Dixon salesman endeavored to sell one of his colleagues one of the Dixon products, proved interesting and valuable.

One of the most helpful outcomes was the personal exchange of a great variety of uses of graphite and methods of application. This exchange of experience opened up possibilities in many new, large and diversified fields. All seemed anxious to give in this respect, but even more interested that nothing should get past them for future valued sales use.

An enthusiasm that did not fade with the closing of the Convention, but which will show up in field performance, was the feature of the Pencil Department sessions. The peak of this enthusiasm was reached in talks centering about Dixon's ELDORADO—"the master drawing pencil." How a year and a half of time, when the world was pencil-hungry, was put into the creating of this super-pencil—then more time into its testing by outside experts—and how in the two years it has been on the market the finest of foreign pencils have been outdistanced in the approval of those who know—all this, with many personal reminiscences, was gone into in an early session and set the pace for the later sessions.

A review of the Pencil sessions would be incomplete without reference to what was a valuable and interesting feature of their program—the sales demonstrations. These encounters between Dixon salesmen and pseudo "purchasing agents" told the story of Dixon selling better than any amount of disconnected comment on the various features of a sale.

Dixon's Silica-Graphite Paint was discussed from all sides and exhibits inspected to see whether they proved the allegation.

It was also brought out at the Convention that one of the reasons of the long service of Dixon's Silica-Graphite Paint is that the pigment in it is Nature's own incomparable mixture of flake silica-graphite.

The aid of GRAPHITE and our illustrated literature was discussed, and we hope that our readers will not only send for a Dixon salesman but also for our literature, which will keep them up to the minute on what Dixon can do for them.

Thursday, December 12th, was the day set apart for the Crucible selling methods. Subjects were assigned with the idea of bringing out the various phases of the crucible situation that needed to be brought prominently to the attention of the salesman, to clear up uncertainties of present conditions and to prepare the way for future conditions.

One of the greatest advantages derived from this session was the personal contact of one salesman with the other, and the exchanging of experiences and problems.

An exhibit of all the Dixon products, advertising and literature was carefully inspected by the visitors, and the personal policies of salesmen with respect to the various items were gone into.

The meeting closed with a motion picture prepared by the Firestone Tire & Rubber Co., showing the development of a salesman through intelligently grasping the idea of the advertising help his house offers and what its use means to him and his trade.

With the fall of the gavel there ended an unforgettable conference, not of employer and employee in their formal relations, but of those who share the responsibilities of the House—man to man.



Dixon Salesmen and Officers Attending Sales Convention

Export Trade

A Primary Lesson in Export Trade by Edward N. Hurley,
Chairman, U. S. Shipping Board

PERHAPS no clearer explanation of export trade can be given than that which is given by Mr. Hurley in *Shipping*, as follows:

"In thinking of foreign trade we are too prone to think of the sale of goods to a customer in some other country and forget that trade is always an exchange of goods . . . our foreign customer has to pay us in the commodities that he is able to produce.

"Let us picture an imaginary customer. Suppose we want to do business with Robinson Crusoe on his desert island. He needs our fabrics and tools. His island has good soil capable of raising foodstuffs. It has goats to yield milk and meat. It has guano for fertilizer and maybe it has developed minerals. Robinson Crusoe does not possess any money and his island resources have been developed only for the needs of himself and Friday. If we send him a merchant ship several times a year with calico and shoes and good American tools for farming, woodworking and blacksmithing, Crusoe and Friday will gather guano, or fatten goats, or raise crops to pay for our goods. That is, they will pay us in raw materials. What was useless now has value to them because through our ships we have provided markets. Crusoe's labors pay a profit. He and Friday live better . . . wear better clothes, have a better table, live in a better house. They may even think about bringing in settlers to help them and open mines inland and running a railroad to the mines."

American manufacturers who do not believe in export trade and who do not encourage it, will nevertheless be

obliged to buy raw materials that are not produced in the United States, and if they do not barter their own production for such materials, they will be obliged to pay in gold and in that way the gold flows away from the country.

Beans

THERE is much being said on the question of beans; whether to bean or not to bean. Some claim we should eat beans and others claim that we should not. All seem to agree that there is a certain inconvenience to beans and the question is how to have the full benefit of beans without the inconvenience.

A tourist who has lived for many years in Spain tells us that beans should be boiled in water with something to give them a flavor, say a bay-leaf, or a bit of garlic or onion, and with salt, of course. Some people add a trifle of spice of some kind.

No pork, beef, or anything of animal fat should be cooked with them.

Previous to the cooking, they should be soaked in cold water over night.

When the dish is served, a spoonful of olive oil should be added to the plate. The result is something tasting well, smelling well, and of quite easy and decent digestion.

Our Spanish friends here say that some vinegar should be added to the oil, and still others say that beans should be eaten with regular French dressing.

Our tourist friend tells us that beans are known in some parts of Spain as "muncheta"; in other parts of Spain they are known as "frijol," from the Arabic language; in Castile, "haba," from the Latin "fara," and also "judia," which means "Jewish woman"; and in some places "alubia."

The high-class Spaniard, in some ways Frenchified, calls it "haricot blanc" and serves it with a thick soup—purée; but never with pork or beef, as we do.



**Columbia Graphophone Company,
Bridgeport, Conn.**

DIXON'S Silica-Graphite Paint was recently used on this 100,000 gallon water tank, 150 foot smokestack, dust collector, and all exposed metal work. The Bridgeport Sign Company were the contracting painters.

Mr. Sloan, Chief Engineer of the Graphophone Company, tells us that he has been a user of Dixon's Paint for the past four years.

Dixon's Silica-Graphite Paint has no equal in resisting the effects of dust, smoke, acids, heat and cold, brine, gases, dampness, and other rust-producing agencies. It is a paint which does not injure potable or boiler water.

Indictment Quashed

**In the Case of United States, Plaintiff, vs. Colgate & Company,
Defendant**

THE indictment brought against our neighbor manufacturer, Colgate & Company, alleging infraction of the Sherman Law, and charging that a combination had been formed compelling all dealers handling the Colgate products to sell at uniform price, has been quashed.

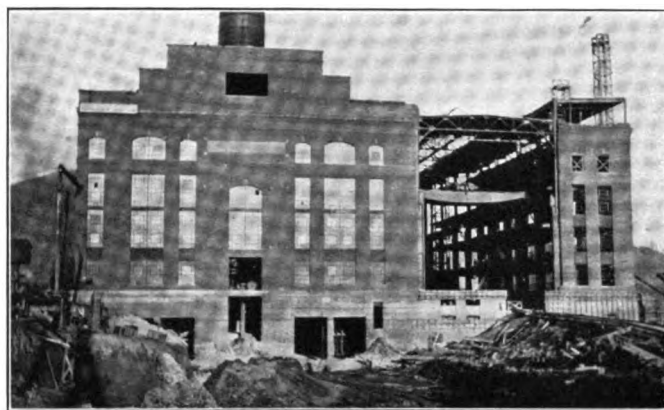
In the view taken by the court, the question presented was whether a manufacturer of products shipped in interstate trade is subject to criminal prosecution under the Sherman Act for entering into a combination in restraint of such trade and commerce, because he agrees with his wholesale and retail customers upon prices claimed by them to be fair and reasonable, at which the same may be resold, and declines to sell his products to those who will not thus stipulate as to prices.

The question presented for the determination of the court was how far one may control and dispose of his own property, that is to say, whether there is any limitation thereon, if he proceeds in respect thereto in a lawful and bona-fide manner.

After carefully considering the question, the court sustained the demurrer made by the defendant and quashed the indictment.

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SCHILLER gave a proverb to his country that the Kaiser may now take to heart and keep before him at all times: *Es lebt, ein Gott zu strafen und zu rächen.* (God lives, who will punish and avenge.)



**Power Plant, Monongahela Valley
Traction Co., Rivesville, W. Va.**

THE above illustration shows the power plant of the Monongahela Valley Traction Company at Rivesville, W. Va.

Messrs. Sanderson & Porter were the engineers, and the Lackawanna Bridge Company, the contractors.

Dixon's Silica-Graphite Paint was used to protect the 1500 tons of structural steel work contained in this plant.

For construction or maintenance work, where a paint is needed regarding which there can be no question as to its lasting qualities and a customer's satisfaction, Dixon's Paint is invariably the paint recommended.

It is made in **FIRST QUALITY** only. It has a world-wide reputation. It is not sold on a basis of "cheaper per gallon," but cheaper "per year of service." Remember, it **LASTS LONGER.**

To build a good building and use a cheap paint, is surely an unworthy policy.

If interested, write us for illustrated literature and long service records.

Murderer—Assassin

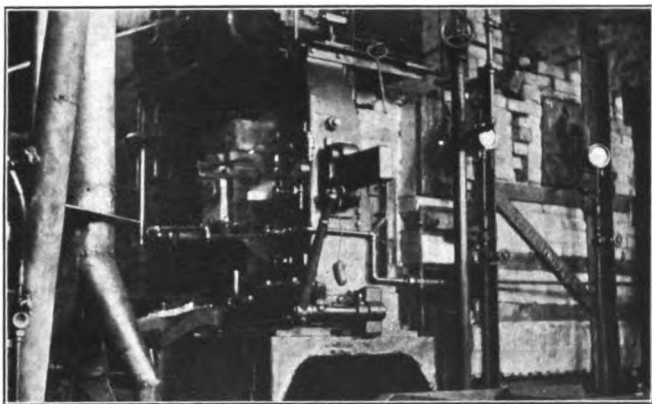
BOTH of the above words have time and again been applied to the Kaiser, now William Hohenzollern.

MURDER—in law, "The offence of unlawfully killing a human being with malice aforethought, expressed or implied." At common law, there were no grades or degrees of murder, but by statutes in many States of the United States, the offense is divided into two degrees, murder in the first degree being the most severely punished and restricted to those cases where the killing was wilful, deliberate, premeditated or especially cruel, or where it was done in the commission of some heinous felony, as arson, rape, etc.

ASSASSIN—Previous to 1700, this word was accented on the first syllable. Its definition, as given by Webster, is "One who has drunk of the hashish. The Order of Assassins was founded in Persia about 1090, by Hassan ben Sabbah, and spread into Syria and Asia Minor. Its absolute head was the Old Man of the Mountain, and its fanatical practice of secret murder (said to be committed under the influence of hashish) made it a widespread terror for nearly two centuries."

A second definition is given as "One who kills or attempts to kill by surprise or secret assault; one who treacherously murders anyone unprepared for defense; especially the hired or appointed murderer of a public person."

If popular vote were taken, both titles probably would be given William Hohenzollern.



Bottles

THE lay reader has a wide knowledge of glass bottles of all shapes, colors and sizes, often has a too intimate acquaintance with their contents, but it is quite probable he does not know how they are made. Maybe he is not interested in such prosaic matters or possibly he knows that in a general way the process of manufacture consists in catching up a ball of molten glass on the end of a blow pipe, inserting it within a mold, and skillfully blowing out the plastic ball of glass to conform to the shape of the mold. After the glass shell thus formed has been cooled and annealed it becomes the bottle of commerce.

For centuries bottles have been blown by men who stood stripped to the waist before small holes in a fiery furnace and blew bottles at a surprising speed. Now machines have largely supplanted men, especially on fruit jars, beer bottles and the less complicated shapes. One of these ingenious mechanical blowers, known as a Hartford-Fairmount Bottle Machine, is shown in the accompanying illustration.

The small, bright oblong space visible in the front is the part of the machine through which the shears pass that cut the soft glass. When the shears are not in the heating portion of the furnace cold water is constantly running on them, which makes it difficult to keep them greased. In order that the cut be clean, the shears must be greased, and it was discovered that Dixon's Waterproof Graphite Grease defies the heat and water longer than any other lubricant.

With Dixon's Waterproof Graphite Grease it is necessary to leave the mold table less frequently to grease the shears and funnel of the machine, because each application of this grease lasts from 35 to 45 minutes. Grease is applied by means of a swab.

"Blow 'Em Up!"

THE other day, when a prominent manufacturer was asked what he was going to do with his plant extensions, he replied, "Blow 'em up! they've paid for themselves." He will not blow them up, he will keep on making goods and more of them, for he will have before him a bigger field—a world-wide field, as every other manufacturer will have who makes goods that are needed throughout the world.

The manufacturers who will be best equipped to get business and who consider the best interests of their stockholders will be those who cultivate good will by vigorous advertising and who have so organized their plants and selling forces that they are able to command their share of business in all parts of the world.



St. Joseph's Infirmary, Hot Springs, Ark.

THE fire-escape shown on the right of the photograph and also the hot-water plant and all metal-work in the power room were painted with Dixon's Silica-Graphite Paint.

Mr. S. M. Hanar, the capable engineer of this institution, writes as follows:

"You have my full endorsement of Dixon's Silica-Graphite Paint. I have used it several times and find it to be the best protective paint for doing a good and lasting job."

Dixon's Silica-Graphite Paint is standard protective paint for boiler rooms, fire escapes, iron shutters, fences, tanks, and is widely specified and used for these purposes by engineers, superintendents, architects, and owners of the largest hotels, apartments, institutions, etc., of the country.

Moreover, Dixon's Paint is equally useful and enduring on wood work.

Send for our descriptive literature to learn surprising economy and decorative paint facts in connection with Dixon's Silica-Graphite Paint.

"The Ring Ceremony"

NOT so many hundred miles from New York there lives a Justice of Peace who, after many years of hitching and unhitching couples, has found himself puzzled in regard to a request lately made of him to perform the "ring ceremony." He writes to a city stationer as follows:

"During my 20-odd years of practice I have assisted many a man and woman to remove the matrimonial halter when it commenced to chafe, and in the past five years as judge have tied the knot that made two mortals happy or kept them in everlasting torment for the rest of their natural lives.

"This you say has nothing to do with you, but listen! I have managed to do this after a fashion of my own and get away with it, but the other day a young couple made me look like a department store garment after a hard shower by asking me to perform the 'ring ceremony.' I did it, but probably not like anything that ever was in heaven or on earth, and now I come to what I want:

"Have you any forms for the marriage ceremony, either with or without the ring ceremony, and if so, what is the cost?"

Tempting People to Paint

IT is well said that there is a mesmeric fascination in watching paint transform an old shabby surface into something bright and attractive.

We stand and watch the painter applying his brush even at the risk of paint spots on our outer garments or on our observing heads.

That there is an irresistible itching to apply the paint ourselves is shown by Mark Twain in his story of "Tom Sawyer." It will be remembered that Tom capitalized on this tendency by selling the boys the privilege of painting Aunt Polly's fence. His profits were an apple, a kite, a dead rat and a string to swing it with, twelve marbles, part of a jew's-harp, a piece of blue bottle-glass, a spool cannon, a key, a fragment of chalk, a glass stopper for a decanter, a tin soldier, a couple of tadpoles, six fire-crackers, a kitten with only one eye, a brass doorknob, a dog collar, the handle of a knife, four pieces of orange peel, and a dilapidated window sash.

The profit of the man who applies Dixon's Silica-Graphite Paint to his smokestack or roof or boiler-front, or any other surface requiring protective paint, is the satisfaction that comes in a coating of paint that is good to look upon, with a choice of four colors any one of which can be used as a trimming if desired, and a knowledge based on the experience of others for over fifty years that he will not need to repaint for perhaps many years to come.

Sometimes repainting has been done, not for greater durability, but simply through a desire for a change of color.

Dixon's Silica-Graphite Paint is a paint that is not affected by heat or cold, acids or alkalies, and is one that is not affected by sunlight and therefore never fades. The only change that can come to it is the natural discoloration which comes from dust and smoke and to which all paints are subject.

Now that the stress of war is over, houses and iron work of all kinds should be brightened up and better protected with a coat of Dixon's Silica-Graphite Paint.

The Dixon Line of Belt Dressings

THE market is flooded with belt dressings—all stuck up with them—solid, paste and liquid, good, bad and worse. The good ones can be counted on your fingers.

In view of the present cost of belting and the need for conserving materials, it is a shame that so many belts are ruined each year through careless treatment and the use of harmful "belt foods."

Of course we make preparations for treating belts, but can honestly state that they are "good ones." In fact, they are just as good as we know how to make them. There may be others nearly as safe as Dixon's, but we have never heard of any better.

Dixon's Traction Belt Dressing (paste) is undoubtedly the best leather preservative obtainable anywhere. It restores to leather belts their natural pliability and tractive power without being sticky or causing the leather to stretch.

Dixon's Solid Belt Dressing is one of the most popular preparations of our varied line. It is no better than Traction Belt Dressing, but it is more convenient to apply. The bars weigh about one pound each. Solid Belt Dressing may be used on rubber and fabric belting as well as on leather.

Dixon's Belt Dressings are sure bets. Our reputation for producing only goods of high quality and our ninety years' experience are behind them. We suggest that you specify "Dixon's" when you order again.



Electric Light Poles, Rio de Janeiro Tramway, Light & Power Co., Rio de Janeiro, Brazil, S. A.

Five Years' Paint Service

IN the August, 1915, issue of GRAPHITE we illustrated the electric light poles owned by the above system. We then referred to a service of two years given by Dixon's Silica-Graphite Paint, which was considered a remarkable service record under the existing conditions.

Probably there is no place in the world where the attack on the paint film is more severe than on poles placed along the Avenida Beira Mar, Rio de Janeiro. Quite frequently the surf is heavy enough to throw a salt spray, mixed with sand, over the electric light and gas poles, and this, with the hot sun, has caused all other paints except Dixon's Silica-Graphite Paint to bleach out or peel off in a comparatively short time.

We now have a report to the effect that the paint after five years' service is still in good condition and repainting is not necessary.

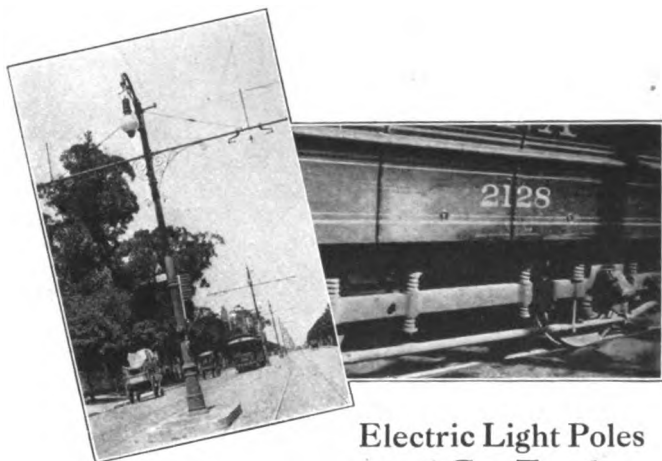
If Dixon's Paint will give such remarkable service under such severe conditions as mentioned above, what will it do on poles and other metal work not subjected to these conditions?

Dixon Known the World Over

AT the Convention of the American Manufacturers Export Association held in New York City in October last, the writer was introduced at different times to visitors from foreign countries. When the additional remark was made, "He represents the Joseph Dixon Crucible Company," the response was: "Indeed! Why, the Dixon goods are well known in my country, as undoubtedly they are in other foreign countries." It was found that the Dixon Company was far better known than Jersey City. In fact, the visitors seemed to consider the bigness of Dixon akin to the bigness of New York.

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THE wire that does the humming is not the wire that has the kick in it. It is the quiet, innocent-looking wire which bears the sign: "Danger—Live Wire."



Electric Light Poles and Car Trucks, Buenos Aires, Argentine, South America

IN another section of this issue of GRAPHITE, we have mentioned the excellent service that Dixon's Paint has given in Rio de Janeiro on electric light poles.

It is also used there on trolley poles as well. We are illustrating an ornamental electric light pole in Buenos Aires, and also one of the electric company's car trucks in that famous city. Both the poles and the trucks are painted with Dixon's Silica-Graphite Paint.

The Buenos Aires Street Car Company has adopted Dixon's Paint as their standard protective paint on all their poles and trucks and the Dixon Company is informed that they are very well pleased with the results. This street car company and one at Rio de Janeiro are the two largest street car companies in South America and both of these companies adopted Dixon's Silica-Graphite Paint after most careful tests.

Electroliers, Pacific Gas & Electric Co., San Francisco, Cal.

REBUILT San Francisco owes much to the Pacific Gas & Electric Company, and to W. D. Fennimore, President of the Downtown Association of San Francisco, and to J. S. Lisberger, Chief Engineer of electrical distribution of the Gas and Electric Company.

The artistic electrolier shown on the front cover of this issue of GRAPHITE bears a card

WET PAINT
painted with
DIXON'S SILICA-GRAPHITE PAINT
JOSEPH DIXON CRUCIBLE COMPANY
Jersey City, N. J.

The photograph was taken on Geary Street, looking East from Grant Avenue, and the line of 150 to 200 of these handsome electroliers erected at an approximate cost of \$90,000 (all painted with Dixon's Silica-Graphite Paint) can be seen plainly.

When San Francisco rebuilt, she went into the rehabilitation handsomely in the way of buildings, lighting equipment, etc., and the best was chosen, including Dixon's Silica-Graphite Paint, because the best grade is the lowest priced "per year of service." And San Francisco goes even across the continent to get the BEST paint; therefore, perhaps we ought to say Jersey City salutes its young and most beautiful sister, the new San Francisco.

GALLAUDET AIRCRAFT CORPORATION

EAST GREENWICH, R. I.

September
Twenty-third
Nineteen Eighteen

Joseph Dixon Crucible Co.,
Jersey City, N. J.,

Dear Sir:

We have already acknowledged
with thanks receipt of your samples of ELDORADO
pencils.

We have used these with
the best of results for the past month or two,
but the best proof of our entire satisfaction is
the fact that we have already ordered several of your
different grades, and shall continue to do so as
long as their excellent quality is maintained.
We have had no difficulty whatever in obtaining
your ELDORADO pencils, as each of the several firms
we purchase our supplies from carry them in stock.

Very truly yours,
GALLAUDET AIRCRAFT CORP'N.

H. E. Archibull
Chief Draftsman

HBC/J

Paint for Automobile and Truck

JONATHAN DIXON, President of Cole & Dixon, truck distributors, Jersey City, gives the following interview in the *Jersey Journal* of November 2, 1918:

"The motor truck is becoming a bigger asset each day. If it were not for the trucks, this year's Jersey peach crop would have rotted. The railroads carried but ten per cent of the crop to market. Motor trucks carried 90 per cent.

We are hearing a lot these days about labor and unnecessary repairs. Paint is one of the big wonder workers.

Do not forget that paint on the motor car is not wholly for looks. Paint protects the surface below from the effects of moisture or mud. And this is true whether the surface be metal or wood. For instance, the conventional wooden wheel will quickly go to pieces if it is not conserved by a coat of paint. And so, by the same token, will the wire wheel, if it is not similarly preserved. Do not let the paint flake off and permit the elements to work their way underneath."

We endorse what Mr. Dixon says.

Dixon's Silica-Graphite Paint is widely used by automobile concerns for protecting the chassis, engine and under parts, engine cylinders, tire rims (to keep the tires from sticking). It is also an ideal protector for hoods, mud guards and spokes. It is also recommended for use on radiators, because graphite is a conductor of heat, and will aid in full cooling efficiency.

In other words, it is recommended for all parts of automobiles, trucks or tractors, where wear and weather are the problems.

Use it on your car and see what important economies it will produce for your benefit.

Dixon's Silica-Graphite Paint is made in **FIRST QUALITY** only.

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THE man with a full meal often forgets it will not last forever. So it is with the man who places one-time advertisements.



Trolley Poles, International Railway Co., Buffalo, N. Y.

THE Apocrypha enjoins, "Let us now praise famous men."

Buffalo, New York, has done so in the chaste obelisk illustrated above, erected in memory of President McKinley.

The electric poles shown are those of the International Railway. They were painted in 1906 and again in 1914 with Dixon's Silica-Graphite Paint, an eight-years' service. The poles are at the present time in perfect condition.

Dixon's Paint has been used by electric light concerns, power companies, and others the world over, for transmission poles, trolley poles and trucks, smokestacks, etc. No paint equals it in durability, yearly economy, and invariable highest standard *only*.

Dixon's Paint is not a paint sold by "gallon price," but on long life and "lowest cost per year of service."

This is "Reconstruction Year" as well as "Victory Year," and that should mean to you in paint upkeep a "Dixon's Silica-Graphite Paint" year.

The Dixon Company has many service records of eight to fifteen years on exposed metal and wood. If interested write us for literature.

The New Year

EACH recurring New Year is an open door. However arbitrary are the divisions of Time, there is an inspiration and exaltation in standing on the threshold of an untried year, with its fresh pages awaiting record. It is again the era of possibilities.

Visions and enthusiasms are the true guides in life. So keep true to the ideal dream that in some rare and exalted moment falls upon the soul, is to set one's steps toward that success which lies in fulfilment.

Life stretches before one in its diviner unity,—even in the wholeness of the life that is and that which is to come. There is not one set of motions and purposes to be applied to this life, and another set to that which awaits us. It is well to drop the old that one may seize the new.

—Lilian Whiting.

Export Convention Elicits High Governmental Commendation

EVIDENCE is at hand which indicates beyond question that the effect of the Ninth Annual Convention of the American Manufacturers Export Association is being felt not only throughout the United States, but is at the same time becoming the means of conveying a message of great import to the Allied nations. Official commendation is freely given on the masterly manner in which the speakers of the Convention discussed their topics, and it is pointed out that the principles involved in the resolutions adopted by the Convention are the first direct steps toward a closer national unity in foreign trade after the war. From several quarters comes the report that official Washington is not only in complete accord with the broad principles outlined at the Convention, but that it is disposed to assist in the execution of the plans laid by the Convention.

Further evidence of the completeness which characterizes the official commendation of the work of the Convention is seen in the fact that some of the addresses made before the Convention, notably the one by President George Ed. Smith, are being prepared in foreign languages for thorough distribution in the Allied countries. It is believed that the remarks of several speakers before the Convention elucidate the principle of adopting broad-visioned methods in foreign trade, to a remarkable degree. Such policies as this are to be backed to the limit by the Government.

Saves 500 Per Cent

A CERTAIN supply company out west advertises for salesmen for "A Most Essential Food Necessity" claiming a saving of "500 per cent." Some food prices may have gone up 500 per cent, but to come down 500 per cent will be like set-back euchre—about 450 in the hole.

Making Pencils Out of an Old House

WE have been offered the logs of an old house which was given up years ago by its owner, who evidently has so prospered that he is anxious to have the old log house disappear from his property.

The house was built of logs of native cedar, but unfortunately the cedar was native to one of the Northern States that does not grow cedar suitable for pencils. Cedar suitable for lead pencils is very seldom found north of Tennessee.

Many years ago, the Dixon Company bought the logs of an old Spanish fort erected in St. Augustine some two hundred years ago. The logs were used for making lead pencils, which pencils were suitably stamped and sent out as souvenirs by the Dixon Company.

The Purchasing Agent

ONE difficulty with the Purchasing Agent is that he cannot be an expert judge of all the many things that he is called upon to buy for the company he represents.

Therefore, he is often influenced by the glib tongue of the salesman and buys according to price and not according to quality.

If he himself is not a judge of the quality of the goods offered, he should have in mind the reputation of the manufacturer of same.

Lest We Forget

LEST it be forgotten, we want to remind readers of GRAPHITE that the Joseph Dixon Crucible Company instituted daylight saving at its mines at Ticonderoga some twenty-five years ago. We do not know that we may be called the father of daylight saving or not, but if there is any company better entitled to that distinction, we would like to know of it.

Mr. John Anderson, a member of the Legislative Council of Newfoundland, has been called the father of the

fore revising as rapidly as possible their rules of conservation, and in conformity with such revision the conservation list will be materially abbreviated.

The War Trade Board are now in position to grant many export licenses which heretofore have been refused for reasons of conservation.

Appreciation

WE very often receive letters telling us what a fine publication GRAPHITE is, and occasionally we meet someone from the far West, or some other distant point, who tells us that he considers GRAPHITE one of the best, if not the very best piece of advertising that the Dixon Company puts out. Lately a gentleman from South America suggested that we add a Spanish column for the benefit of our Latin-American readers.

Our latest compliment comes from the Department of the Interior, Bureau of Education, at Washington, in the way of information that slips are being sent out and among them one headed "Antonio Alia," which concerns the little Dixon bootblack.

The article is

taken from GRAPHITE of September.

1919 Holidays

HOLIDAYS in 1919 promise well for the out-of-door and out-of-office lovers. Washington's Birthday comes on a Saturday. Decoration Day comes on a Friday, so three days of recreation may be counted on. As many know and many do not know, Fourth of July always comes on the same day of the week as Decoration Day, so once more we have three holidays together. Labor Day, Election Day, Thanksgiving and Christmas are not disturbed by the almanac.

♦ ♦ ♦

"MANY men are like cuckoo clocks. They cuckoo every time the boss speaks."

Ain't It Discouragin'?—Hopkins



one-hour daylight-saving plan, but he gives the credit for the daylight-saving plan to William Willett, an English architect, who died two years ago and who began his campaign to aid the working man in saving an hour of daylight for labor in 1907.

Change of Rules

BECAUSE of the signing of the Armistice, it became possible for the War Trade Board to alter many of their regulations governing the exportation of certain commodities which the continuance of the war has heretofore made it necessary to conserve much more strictly than present circumstances require.

The War Trade Board are there-

Code of Honorable Names

MY name for every true man in these United States will be the honorable name of "American."

My reference to all "new Americans" born in other lands shall never be dishonored by slurs, nicknames or hyphens.

My purpose shall be to discourage in the native born the love for titles, to help every immigrant to forget his hyphen and be proud of the name American and to stamp out the use of such nicknames as words of derision of the foreign-born.

We pledge our service never to use, and to discourage everywhere, the use of such words as Dago, Dutchy, Froggy, Ginny, Greaser, Heiny, Horwat, Hunky, Kike, Mick, Paddy, Sheeny, Spaghetti, Wop, as applied to any foreign-born resident of the United States of America.

A Graphite Monument

Graphite-Marble Monuments

Why not mark the resting place of those dear, loved ones that have passed away with a nice monument? Why not drop me a line and I will gladly call with a full line of designs in Granite and Marble at all prices.

FRED LAUGHLIN,
General Agent,
Ticonderoga, N. Y.

Lock Box 753.

We make no charge for extending the publicity of the above advertisement found in the *Ticonderoga Sentinel*. We are glad to have people think, write, and dream of graphite,—especially Dixon's.

♦ ♦ ♦
"I THANK you for the promptness with which you responded to my request for 'Useful Spanish Words and Phrases,' and for the most generous manner in which you replied. The children are using the books in my classes in conversational Spanish and they unite with me in appreciation of them. We find these little books the most convenient and helpful aid in learning Spanish that we have been able to secure. I wish that you could have seen the delight of the children when they received the books and learned that they could keep them for their own. Before getting these books I had been making carbon copies of similar words for their use. The books have saved me a great deal of labor and provide exactly the vocabulary I have been looking for."

GOLDEN BOUQUETS

OR WHY

DIXON'S
ELDORADO

"The Master Drawing Pencil"

SHOULD BE USED

"REPLYING to your letter with reference to ELDORADO drawing pencils, we wish to state that the samples sent us are very satisfactory."

"THE samples of drawing pencils recently sent us have proved quite satisfactory."

"WE are in receipt of your letter of the — inst. in regard to ELDORADO drawing pencils, and beg to advise that same have proved very satisfactory and wish to advise that we have been using same for some time."

"REPLYING to your favor of — regarding ELDORADO drawing pencils would state that the sample pencils which we have used are entirely satisfactory for our use."

"THE samples of ELDORADO pencils have proved quite satisfactory and I am glad to recommend them for my work."

"REPLYING to your inquiry in reference to ELDORADO drawing pencils we wish to advise that we have been specifying these pencils for some time past."

"DIXON'S ELDORADO answers our purposes better than any pencil we can find on the market at the present time."

"WE are pleased to advise that we have placed our order with local dealers. These pencils are entirely satisfactory for our needs."

"I HAVE been so much pleased with your samples of ELDORADO pencils received some time ago that I cannot imagine anything could be better. Please accept my most sincere thanks."

"I BEG to acknowledge receipt of your letter of — relative to ELDORADO pencils. Beg to advise that those your representative left here proved entirely satisfactory and on our December requisition, which was received some time during January, ELDORADO pencils were furnished by our stationery department."

"HAVE to-day tested the samples of Dixon's ELDORADO pencils submitted and am pleased to testify to their fine quality. The lead is unusually smooth and even, allowing rapid and sure work with great ease. Dixon's 'Best White' I used to accent the lights on a pencil sketch done on toned paper. It served the purpose excellently."

"I RECEIVED several pencils made by your firm, and, after usage, I find them to my liking and expect to have them hereafter."

"RECEIVED a few samples of your Dixon ELDORADO pencils some time ago and find them the most suitable pencil I have ever used. For crayon drawing the Dixon No. 804 is certainly a wonder for zinc reproductions."

"WE have found Dixon's ELDORADO drawing pencils very satisfactory, and are buying them right along from our supply house."

"THE ELDORADO drawing pencils which you sent to me some time ago were received and have proved satisfactory."

"THE sample pencils were received in good condition and are living up to their reputation for service. We find the white one especially good for corrections on blue prints in our shops. Your drawing pencils have all the good qualities that a draftsman could ask for in a pencil."

♦ ♦ ♦
AFTER we have read the headings and the war news for about a week, we are reminded of what the small boy said one day in school.

A young hopeful said that the surface of the earth consisted of land and water. "What, then," asked the teacher, "do land and water make?" "Mud," was the instant rejoinder.

Rhymes!

WHEN you think of paint
That would please a saint,
Think of "Dixon's Silica-Graphite."
Paint to-day and save to-morrow,
Thus rust-troubles you don't borrow!



This Dial Tells The Story

as to the condition of your boilers. If scale is present the efficiency of a boiler is reduced and more coal and time are necessary to get up and maintain the proper steam pressure.

DIXON'S PIONEER BOILER GRAPHITE

increases steaming capacity, reduces fuel consumption by making it possible to remove old scale.

The action of Dixon's Pioneer Boiler Graphite is purely mechanical. It is unaffected by acid in the water or heat generated in the boiler. The fine flakes of graphite simply work their way through the minute fissures in old scale and gradually penetrate between the scale and the metal. The scale thus loosened may be easily removed at less cost of time and labor.

Do not confuse Dixon's with ordinary Boiler Graphite.

Write for Booklet No. 190-T, "Graphite for the Boiler." It tells you how and why Dixon's Pioneer Boiler Graphite will save you money in Boiler Room Maintenance.

Made in JERSEY CITY, N. J., by the

JOSEPH DIXON CRUCIBLE CO.



Established 1827



GENERAL LIBRARY
FEB 14 1919
UNIV. OF MICH.

Graphite

VOL. XXI

FEBRUARY, 1919

No 2



JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED 1827 Jersey City, N. J., U. S. A. INCORPORATED 1868

**Miners, Importers and
Manufacturers of Graphite,
Plumbago, Black Lead**

DIRECTORS

GEORGE T. SMITH GEORGE E. LONG
WILLIAM G. BUMSTED EDWARD L. YOUNG
J. H. SCHERMERHORN HARRY DAILEY
ROBT. E. JENNINGS

OFFICERS

GEORGE T. SMITH *President*
GEORGE E. LONG *Vice-President*
J. H. SCHERMERHORN *Vice-President*
HARRY DAILEY *Secretary*
WILLIAM KOESTER *Treasurer*
ALBERT NORRIS *Ass't Sec'y & Ass't Treas.*

PURCHASING AGENT

JOHN I. McCOMB

OFFICES AND SALESROOMS

NEW YORK SALESROOM 68 Reade Street
PHILADELPHIA SALESROOM 1020 Arch Street
SAN FRANCISCO SALESROOM 155 Second Street
CHICAGO OFFICE 1323 to 1327 Monadnock Block
BOSTON OFFICE 347 John Hancock Building
ST. LOUIS OFFICE 501 Victoria Building
BUFFALO OFFICE, 409 Erie County Savings Bank Bldg.
ATLANTA OFFICE 225 Peachtree Street

EUROPEAN AGENTS

Graphite Products, Ltd., 218-220 Queens Road, Battersea, London

SOUTH AMERICAN AGENTS

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS
ALFREDO J. EICHLER, *General Agent*

Agent for Argentina, Uruguay and Paraguay
E. H. Blanchard, 185 Paseo Colon, Buenos Aires

Agent for Chile, Peru, Ecuador and Bolivia
Enrique Seller, Calle Huerfanos 761, Santiago, Chile

Agent for Brazil
M. V. Powell, Rua Directa 7, Sala 68, São Paulo, Brazil

CUBAN AGENT

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS
William Croft, Room 424 Lonja del Comercio, Havana

Agent for Porto Rico, Virgin Islands and San Domingo
FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS
H. Glyde Gregory, Royal Bank Building, San Juan

LATIN-AMERICAN AGENTS

FOR DIXON'S AMERICAN GRAPHITE PENCILS, ETC.
National Paper and Type Company, 31-35 Burling Slip, N. Y.
*With Branch Houses in Mexico, Cuba, Peru, Argentina,
Uruguay, Venezuela, Porto Rico and Colombia*

CANADIAN AGENTS

FOR DIXON'S AMERICAN GRAPHITE PENCILS, ETC.
A. R. MacDougall & Co., Ltd., 468 King St., West, Toronto, Ontario, Can.
FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS
Canadian Asbestos Company, Montreal, Quebec, Can.

It pays to be fussy about your pencil

A pencil is so important in your work that it pays to insist upon one that is not only good, but absolutely uniform in grading. The fussier you are, the more you will appreciate

**DIXON'S
ELDORADO**
"the master drawing pencil"

We are fussy about it ourselves. We insist that the H's be not only firm and hard but also easy-writing and gritless. We make sure that the B's are not only soft and responsive but unusually strong as well. And we assure you absolute uniformity of every grade.

The Eldorado is made in 17 degrees, from 9H (hardest) to 6B (softest). Among them is a pencil best suited to every kind of work.

Send 15c for full-length samples of your favorite degrees. Please include your dealer's name.



Joseph Dixon Crucible Co.

Dept. 190-J

Jersey City, N. J.



ESTABLISHED 1827





"The Mechanically Perfect Free Port"

IN a recent issue of *The Americas* is an excellent article on "The Mechanically Perfect Free Port," with striking illustrations of free port machinery, particularly that in the port of Hamburg. *The Americas* thus describes the prospect of mechanically perfect installations in the free port which we shall doubtless have in New York:

"So also we are probably to see, perhaps before the war's end, several square miles of the waste sand stretches of New York harbor's environment measured off, securely walled in and transformed into groups of basins and rows of docks; having also acres of concrete-steel warehouses fronted with railroad connections and swiftly working electric cranes. There will be loft buildings for miscellaneous light manufacture and other great lofts where incoming ships will bring quantities of wool, hides, rubber, copra and the other heavy raw materials of commerce."

Far more important than calling attention to the advantages we shall get from a mechanically complete port unit of this sort, *The Americas* points out the commercial service that the free port can render. In particular, it lays emphasis upon the advantage to our industry which will come if we can concentrate in the New York free port the storage, handling and merchandising of raw materials from all over the world. It points out how this concentration developed England, all of whose ports are practically free ports. British merchants and supercargoes went out to all parts of the undeveloped world, selling British goods, particularly textiles. In return, they collected and shipped to England the raw products of these lands—wool, rubber, copra, dried fruits, hides and hundreds of other commodities.

"England used great quantities of the raw materials thus gathered, manufacturing them into exports. But there was a surplus. . . . Nations that had no ships and no over-sea traders bought the overplus. They could get it in England much cheaper than they could send and buy direct in distant lands. So grew up the market, a big London population of shrewd judges of values in commodities growing up in many years which would buy anything that came in, as a speculation, for resale. . . . And for every bargain that manufacturers of other countries got in buying at London (ours no less than others), England's manufacturers were enabled to obtain their materials at a still cheaper cost and, better than our national possession of a variety of natural resources, England by her machinery of overseas ship-

ping and trade got the whole world's raw materials at so low a range of costs as to make it possible for her to thrive upon a free trade system."

By a free port in New York we do not mean anything that has connection with free trade. The country will remain protectionistic as before. A free port is a free trade island, established somewhere within our harbor limits, a place where foreign raw materials can be brought in, stored, handled, mixed, manufactured and shipped inland or abroad, as conditions of the market dictate. If these goods enter this country they pay the custom duties. A free trade country does not need free ports; for, without the aid of such institutions, they have freedom in handling such re-exportation of transshipment business, free from custom restrictions. Germany wanted to get some of the business which London has been enjoying as emporium of the world, as its transshipment center. That is why she established the free port of Hamburg, and this free port did eat mightily into London's business of that sort.

We ought to establish here, in the western hemisphere, an emporium for handling the raw materials of the world. Because we are a protectionistic country, the free port is the proper mechanical agency for realizing those aims.—*The Evening Mail, New York.*

Export Advertising

WE read in *Printers' Ink* that Germany is gloating over the decrease in American advertising in foreign countries. It quotes from the Berlin *Tageblatt*, April 26, 1918, as follows:

"If the despised Yankee nation think they are going to win the war and force Germans out of foreign markets, there is nothing to indicate this sentiment in their local and foreign advertising. Many of their advertising agencies have closed their doors through lack of patronage. Their much-talked-of captains of industry have cancelled advertising contracts everywhere. Germany and German merchants have increased their advertising space in neutral markets and at home. It pays to advertise in war as well as in peace. The far-seeing merchant never stops advertising."

If these German publishers really knew the activity of the American Manufacturers Export Association in the matter of advertising, and in the matter of preparing for business after the war, they probably would have much less to say; at least they would be much better informed.

A COMPLIMENTARY DINNER was given Mr. Julian H. Schermerhorn, Vice-President, Joseph Dixon Crucible Company, at Delmonico's, January 7th, by the Officers and Heads of Manufacturing and Selling Departments of the Company.

As President Geo. T. Smith of the Dixon Company and Mr. Schermerhorn are well and most favorably known by the officials of Delmonico's, one may well understand that no pains were spared by those officials to make the banquet a success, so far as they themselves were concerned.

The banquet room was beautifully decorated and the round table with its twenty-two covers had as its center piece an electric fountain playing, while the beautiful electric light in its center shed a glow over the entire table and its decorations of smilax and roses.

The dinner was given not only as a compliment but as a surprise to Mr. Schermerhorn, who early in the day had been invited with his wife to dine with President Smith at Delmonico's. When President Smith and Mr. and Mrs. Schermerhorn arrived at Delmonico's, Mr. Smith suggested in a casual way to the official in attendance, "I think perhaps we would like a private room to-night. Can you give us one?" The official, who was in the secret, bowed and said he thought he could, and then escorted President Smith and Mr. and Mrs. Schermerhorn to the banquet room, where the door was thrown open and the surprise sprung. To use the words of Mr. Schermerhorn, he was "flabbergasted" and stood as inactive and awkward as he probably did when he stood at the altar with the beautiful woman who accompanied him to the banquet.

Mrs. Schermerhorn was introduced to those of the Company whom she did not already know and was presented with a huge basket of beautiful orchids, in a neat little speech by Mr. H. C. Lewis, General Manager of the National Paper & Type Company, who are the representatives of the Dixon Company throughout Latin America for Dixon's Lead Pencils.

As it was not a "ladies' " night, Mrs. Schermerhorn was escorted with her basket of flowers to another room to dine with some lady friends.

As a further reminder, although none was needed, of the esteem in which Mr. Schermerhorn is held, he was presented with a malacca stick, gold mounted, and with a two-inch gold band bearing his initials, J. H. S.

The presentation of the cane was made at the beginning of the dinner and the souvenir menu cards were autographed at the same time, for the fear, although there proved to be no ground for such fear, that at the end of the banquet eyes and hands might not be quite as good for observation or writing.

Vice-President Geo. E. Long presided as toastmaster. After the usual preliminaries and after the close of what proved to be a most enjoyable dinner, interspersed as it was with short and witty remarks, well parried thrusts and rejoinders, and toasts to the honored guest, and the lady with the orchids, and President Smith, part two was introduced with the coffee and cigars by the toastmaster, who led with

A Get-Together Dinner to Julian H. Schermerhorn

the following address:

"Gentlemen — one and all: I am more than glad to be with you

to-night and to have with me those who are the real directors of the destinies of the Company. It is only those who sit in the boat that can sense and feel the pull of the others who bend to the oars with them.

"I feel therefore that we understand and know each other and appreciate what each and all have done so fully and so well that we do not need to repeat it here, but rather that our evening be spent in full enjoyment of the good things we have had and the good things that are to come from heart and tongue and good companionship.

"Our guest this evening is our own Vice-President, Mr. Julian H. Schermerhorn, to whom we need no introduction and who requires no introduction to us, as he has been one of us for the past twelve years.

"There is a physical hospitality and there is a mental hospitality. It was and it is our intention to offer him this night both to the fullest degree.

"In December we had a very arduous, though a very instructive and profitable Convention of the Executive, the Manufacturing and the Sales Departments, that numbered considerably over the hundred.

"At the conclusion of the Convention it was suggested that the heads of the Departments give a little dinner to Vice-President Schermerhorn, who was the promoter of the Convention and who was the presiding officer at the general sessions.

"It was thought that at such a dinner the Vice-President and his aids would be able to recover to some extent from the exhaustion of that Convention. And after the aids had recovered their second wind, and renewed their courage, heart and determination through the stimulus that a well-ordered dinner brings both physically and mentally, they were to tell that Vice-President how very much they appreciated the opportunities that Convention had brought to them, and, as they believed, to all who attended.

"I was asked to preside at that little dinner and, believing it was to be nothing more elaborate than the assembling of about half a dozen of us in some cozy corner of the Carteret Club, I readily agreed, and now I find myself honored as the toastmaster of this grand function.

"We are not here to-night to extol the virtues of Mr. Schermerhorn, nor to decry his faults. No one knows better than himself that he possesses both. We are here to extend to him our hands in loyalty and friendship.

"This is a 'get-together' dinner—to glimpse the future, perhaps to touch on the past; to glean a little from the present, but above all to realize that we need to get together in order to 'warm up,' and the process of warming up is particularly striking in the phenomenon known as 'second wind.'

"The usual way of getting one's second wind is by not taking heed of the fatigue that bears us down, but by pressing on until we have tapped a level of new energy. If,



however, we continue on until we have tapped our third and fourth, we are in danger of going stale.

"Therefore, instead of tapping a level of new energy, we come here to-night to relax from business cares and to find a stimulus for body, brain and soul that will do us no harm but much good.

"It should be our aim to get the most out of our machinery, our men and ourselves. To my mind, there is a word often misused,—the word 'driver.' Drivers are needed for our engines and our machinery, as a driver is one who uses physical force; who holds the reins of a team, or the levers of a machine.

"It is *leaders* that we need for getting the most and the best out of our men,—leaders who will set an example in work, in fair play, and in doing unto others as they would be done by.

"It is well said that there is pay dirt in every man, and it is up to the man who is in control of men to find it and to bring it out.

"All you who sit with us to-night are leaders, all have men under you, and it is up to you to set the example, for all your actions are reflected down through all your men to the lowest one, whether the actions be good or bad.

"It is now well over forty years since I came with the Company, and I am proud to say that to a more or less degree the Company has always thought in a big way,—in continents rather than in countries or states. It has been my privilege to have helped in the thinking and in the doing, and I trust that it may be my privilege in the years to come to know that you have so carried on the work that no company will be better known throughout the entire world for quality of character and for quality and quantity of products than the Company we love and serve, and to whose prosperity we now drink."

While shop-talk could not well be excluded, nor was it desired to be excluded, it was not the chief feature of the occasion.

It was endeavored on the part of the hosts to give Mr. Schermerhorn a physical and mental hospitality to the fullest extent and at the same time also, to quote from Vice-President Long's remarks, glimpse the future, touch on the past and glean a little from the present, but above all to "warm up."

The past was devoted to reminiscence by the older ones, the present was covered in discussing plans for the betterment of the Company, for its extensions in factories and selling, while the future was outlined by President Smith in his promise to endeavor to the very utmost to build up throughout the world the representation of the Dixon Company for character in its dealings and for quality of products. Mr. H. C. Lewis outlined what seemed to him to be great possibilities for the Dixon Company throughout Latin America, with which countries he is thoroughly familiar and in which he has successful organizations of his own.

Mr. Alfred J. Eichler, the representative of the Dixon Company at Buenos Aires and throughout South America for its graphite products, confirmed all that Mr. Lewis had said and voiced his belief in the vast field for the Dixon Company in other parts of the world.

There were other interesting affairs and subjects discussed, and the time between the beginning of the banquet and the "wee sma' hours" was altogether too short and most delightfully spent.

All of the arrangements for the dinner were made by the Committee of which Mr. Wm. Koester, Treasurer, was Chairman, and Messrs. John M. Ready and Richard Van Dien ably assisted him.

Air-Cylinder Lubrication

IN looking over some of the recent issues of *Coal Age*, my attention was attracted to the inquiry of an engineer who had experienced trouble in the lubrication of the air cylinder of his compressor, and asked for information in regard to the best lubricant to use for that purpose. I have had some experience in the lubrication of cylinders and can appreciate the correspondent's position fully.

Although everything stated in the reply to this inquiry is quite true, I was surprised to find that the writer omitted to mention one of the best air-compressor lubricants manufactured or used. I refer to flake graphite, which has no equal as a lubricant not only in air-compression practice, but likewise for steam engines, gas engines, journals, valves, and, in fact, wherever a lubricant of superior quality is required.

LUBRICATING QUALITIES OF FLAKE GRAPHITE

Flake graphite possesses peculiar properties not found to the same degree in other lubricants. For example, its structure is such that it fills up or overlays the roughnesses of metallic bearing surfaces. As is well known, graphite has a strong tendency to attach itself to a metal surface and quickly imparts to it a superficial glaze that almost eliminates friction.

Again, as a lubricant, graphite is not only more enduring than oil, but possesses the important feature of withstanding a high degree of heat. It is this feature particularly that adapts it to the lubrication of air-compressor and gas-engine cylinders, where the heat is sufficient to volatilize or carbonize the oil and render it useless as a lubricant under such conditions.

Everyone who is familiar with the operation of air compressors or gas engines freely admits that oil has many disadvantages that render its use inefficient and often harmful. The use of graphite for the purposes named would have become universal long since had it not been for the difficulty encountered in introducing the graphite into the engine cylinder.

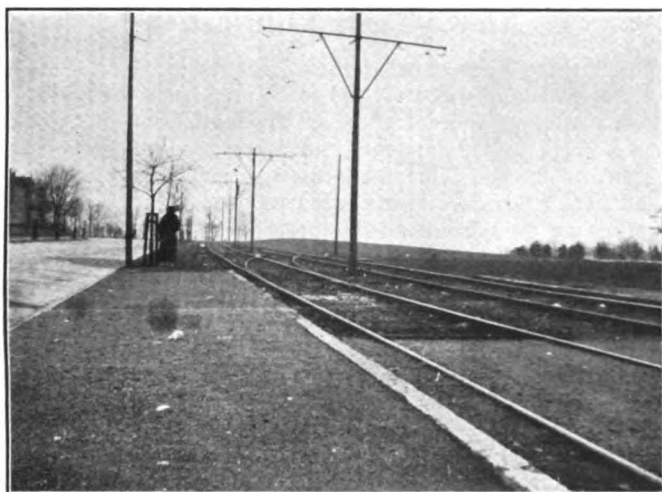
That difficulty, however, is more imaginary than real. Special devices have since been made for automatically feeding flake graphite into cylinders and on all bearing surfaces that must be lubricated. One of these devices is known as the Winans Dry Graphite Lubricator; another, Johnson Graphite Lubricator. It is claimed for each of these that from 50 to 60 per cent. is saved in the cost of lubrication by the use of graphite instead of oil.

In my own practice, I have been using Dixon's Ticonderoga Flake Graphite for the lubrication of air-compressor and gas-engine cylinders, as well as on other moving parts, in all classes of mechanical equipment. Permit me to name a few of the advantages I have found that graphite possesses over oil when used as a lubricant. They are as follows:

Graphite, in lubrication, (1) is unaffected by high temperatures; (2) cannot be carbonized or ignited; (3) cannot give off explosive vapors; (4) does not clog discharge valves; (5) will not accumulate dust or grit; (6) enables a large saving in cost of lubrication; (7) avoids danger of explosion in air-compression practice.

Last, but not least, I have found that the use of graphite in cylinders improves the fit of the piston, while at the same time reducing friction, making repairs less frequent and saving trouble and expense.

—An Engineer, in *Coal Age*.



**Trolley Poles, United Railway & Electric Co.,
Baltimore, Md.**

THE trolley poles of this system are painted with Dixon's Silica-Graphite Paint. The Pamflis Contracting Co., of Baltimore, were the contracting painters.

How often, on close inspection, one sees the paint on trolley poles flaking off in patches! Not so when Dixon's Silica-Graphite Paint is used.

No dampness, expansion, contraction, abrasion by sleet, affects Dixon's Paint, the Longest Lasting, best-clinging, elastic paint, **FIRST QUALITY ONLY**. Used by electric railways for trolley poles and trucks, viaducts, engine rooms of power plants, smokestacks, tanks, etc.

As the matter of saving labor is a chief item during Reconstruction, "Paint once and be done with it when you use Dixon's Silica-Graphite Paint" is a practical maxim.

Dixon's Paint is equally serviceable for wooden buildings.

Be a Dixon user; send for our illustrated literature in your line.

Small Orders

IN the course of a year we frequently get small orders accompanied by an apology for the smallness of the order. Please have in mind that we are mighty glad to get small orders. They give us a frequent chance to think of you, and, as it were, to get in touch with you.

The real fact that you want some of our goods even in a small way, is a big thing with us. With the coming of that small order comes the knowledge to us that back of your small order there has been a real need for us, as there will be back of any large order that you may be pleased to send us.

When we fill your small order we shall try to meet your needs with full satisfaction, and that small order will receive as good attention as though it were a million-dollar order.

Therefore, we send you our Greetings for the New Year and thank you in advance for any small orders that you may be pleased to send us.

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"We will be in the market for Dixon's Waterproof Graphite Grease shortly after the first of the year, and will place an order with you, for we know your grease is **A1**. We have had very good results with it in the past."—*F. W. Foley*.

The Value of Experience

A MANUFACTURER in calculating the production value of a machine considers what it will produce in quantity and quality per hour, per day, and during a period of some considerable length.

Many a machine has been discarded or has not been adopted even though its hourly output rate was high, because its total output during a lengthy period was less than that of a slower machine which had the very desirable quality of regularity,—of "keeping everlastingly at it."

The manufacturer or the man who hires office help or salesmen is too prone to figure on his output per day. He is likely to overlook the fact that it is not so much what an employee produces in an hour, in one day, or even in one week, that counts, as what that employee produces during his working lifetime.

A salesman or an employee will gather, as the years go by, information and experience that are really beyond the value of computation.

The hiring and the discharging of labor, of clerks, of salesmen and of help generally is more often in the hands of men very competent, perhaps, in some positions, but mighty incompetent in judging the value of human work.

They have learned in England since the war began very much about the output capacity of male and female workers—that it is very much better to increase pay than to promote to some other position that has commanded a higher rate.

Years ago in our public schools, as many of us know, it was customary to pay primary teachers, that is, the teachers of the little ones, just as small an amount as they could be hired for. Later on, it was found that the teachers in the primary department were really the most valuable teachers, all things considered, in the schools.

So in England they have learned, as I have said, since the beginning of the war, the commercial value of an employee, the value of his health and the value of his total output, and they have learned much that our so-called "bosses" of shop and office have not as yet learned.

The Army's Health

THE United States Committee on Public Information tells us that during the Mexican War the annual death-rate from disease among our troops was 100 men out of every thousand. During our Civil War, the rate was as high as 60 out of every thousand. During our Spanish-American War it was 25 out of every thousand. Now the Surgeon-General's Office reports that among our troops at home and abroad the annual death-rate from disease fluctuates from less than two per thousand to slightly more than three per thousand.

The best of all previous performances was in the Russian-Japanese War, when the annual death-rate from disease among the Japanese troops was 20 per thousand. Our present rate is about one-tenth of that.

The annual death-rate from disease among American men of military age in civil life is 6.7 per thousand. Our army rate is about one-third of that.

This record has been achieved by a campaign of administrative vigilance that has used every means to protect and promote and assure the health of millions of men.

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"We use Dixon's Waterproof Graphite Grease for slushing gears and have used no other for twenty years."—*Jarvis Paper Mills*.

What Electricity Is

WE read in *Southern Engineer* for December that the word "electricity" had rather a vague meaning until about fifteen years ago. Before that time, most scientists and electricians referred to electricity as a "state" or "condition of strain," a "distortion," a "displacement" or "agitation of something"—heaven only knows what. Even now we do not, by any means, know just what electricity is, but we know enough to keep us from groping in the dark as were those before us.

Southern Engineer further tells us that Benjamin Franklin proposed a theory of electricity away back in 1750 which was, in a broad-gauge way, quite similar to the one now accepted. How on earth he ever hit upon it is almost beyond understanding.

"Franklin's theories and inventions were not received with favor in England. The feeling was apparently that it would be impossible that anything proposed by an American backwoodsman could be of importance and, furthermore, there was likely a little jealousy mixed in. Some of the European countries were inclined at least to give him a hearing which he did not get in England. France in particular was receptive and his lightning-rod invention was well received there. But his theory of electricity, though certainly in the right direction, and, as we now know, more consistent than any proposed previously, was discarded for more complicated ones.


"It has been established beyond doubt that electricity cannot be 'secured,' 'produced,' or 'generated,' in spite of the fact that the term 'generation of electricity' is frequently used. There is in the universe a certain definite amount of electricity, and while it may be forced to move from one location to another, electricity cannot be created nor can it be destroyed. When a person makes the statement that electricity is generated by a battery or dynamo, what he really means is that the battery or dynamo forces electricity, which is already in existence, to move. The battery or dynamo does not generate electricity in the wire connected to it any more than a pump which is impelling a stream of water in a pipe generates the water."

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Nauticus, a journal of shipping, insurance, investments, and engineering, published in New York, says: "It would be idle to deny the fact that much of the tonnage which is being built at present is not built to last. Many of the ships built are just what their name implies: namely, emergency ships, which will keep afloat and deliver their cargoes in tolerably good condition until they are cast away on shore, sunk in collision or destroyed by the explosion of a mine or torpedo. To replace these ships in the interest of trade, if they outlast the war, will supply work for the national shipbuilding industry, unless it is allowed to perish and we are allowed to return to the old conditions under which ships could not be built in this country in competition with England. The nation must, therefore, supply the American shipbuilding industry with an incentive to remain in existence."

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"With reference to Dixon's Waterproof Graphite Grease we beg to say that we still have some of the last lot purchased from you, but as soon as we are in need of more, we will send you an order, because we find it very satisfactory for the purpose for which we use it."—*El Paso Foundry & Machine Co.*

CLASSES OF DOMESTIC SERVICE Telegram _____ Night Message _____ Day Letter _____ Night Letter _____ Charges if any: \$ _____		WESTERN UNION TELEGRAMS  CABLEGRAMS BY TELEPHONE FROM THE WESTERN UNION MAIN OFFICE <small>NETWORKS CABLES MESSAGE</small> <small>BOOKED IN 5 MINUTES</small> <small>REPLY VIA TELEPHONE</small>		CLASSES OF CABLE SERVICE Full Rate _____ Half Rate Deferred _____ Cable Letter _____ Week End Letter _____ Charges if any: \$ _____
Dated WACO TEXAS NOV 18 1918 RZDA CBC 106 COLLECT HL				
To DIXON CRUCIBLE COMPANY JERSEY CITY NEW JERSEY				
DIXONS AUTO LUBRICANTS FIGURED PROMINENTLY IN THE DIRT TRACK RACING SEASON WHICH CLOSED YESTERDAY AT THE TEXAS COTTON PALACE SEVEN DRIVERS ALL USING DIXONS FAMOUS AUTO LUBRICANTS WON 113 RACES BEFORE A MILLION FIVE HUNDRED THOUSAND PEOPLE AT 42 GREAT STATE AND DISTRICT FAIRS IN UNITED STATES AND CANADA AND LOWERED 8 WORLD RECORDS AND 49 TRACK RECORDS SIG HAUGDAHL NORWEGIAN SPEEDSTER WON THE WORLDS DIRT TRACK TITLE WITH ASSISTANCE OF DIXONS LUBRICANTS FRED MOREY WON THE COTTON PALACE SWEEPSTAKES YESTERDAY AT THE TEXAS COTTON PALACE TRACK GENL HARTMAN AND SIX HUNDRED OFFICERS FROM DIFFERENT CAMPS IN STATE OF TEXAS ATTENDED J ALEX SLOAN				

"English As She Is Writ"

WHEN the evidence comes to us, as it has, of the amount of illiteracy found in our own United States, how deplorable must be the ignorance of many of the countries that we have heard of as being far lower than the United States in intelligence!

The officers of the United States War Risk Bureau have given publicity to some of the replies that they have received as an instance of how some have replied to the inquiries made by the War Risk Bureau.

One woman informed them that she was a widow and four children.

Another woman, speaking of her soldier husband, said, "Previous to his departure we were married to a Justice of the Peace."

Another, speaking of her husband who had joined the colors, said: "I have a four months' baby and he is my only support."

A man claiming exemption said, "Owing to my condition which I haven't walked in three months for a broken leg which is No. 75."

Another, being in doubt of the gender of the one addressed, said, "Kind sir or she:—", and ended with, "I enclose lovingly yours."

Another writer said: "I am left with a child seven months old and she is a baby and cannot work."

A woman, in answer to the question, "Your relationship to him?" filled in the answer, "Just a mere aunt and a few cousins."

Another woman replied, "I am his wife and only air."

A man, being asked his allotment number, replied, "I have four boys and two girls."

Another man, wishing to have them correct his name, said: "Please correct my name, as I could not and would not go under a consumed name."

A woman who believed in going to higher authority, wrote President Wilson's wife as follows: "Now, Mrs. Wilson, I need help bad, see if the President can't help me. I need him to see after me."

Some of the replies in the list we have in hand are so exceedingly clever that we are beginning to doubt if they are not manufactured.

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"We use only Dixon's Waterproof Graphite Gear Grease and have done so for years."—*Munroe Felt & Paper Co.*



Grain Elevator, Schultz & Niemeier Commission Co., Granite City, Ill.

THE owners write us, "Painted in May, 1918, with Dixon's Silica-Graphite Paint, and from its appearance we conclude it will outlast any other paint we have applied before."

Mr. R. W. Hansmann, 3003 North Spring Avenue, St. Louis, was the contracting painter.

A prudent owner, an experienced painter, and a good paint, all go together in getting economy and Long Service.

Dixon's Silica-Graphite Paint is standard for grain elevators, and when well-known owners, like the Schultz & Niemeier Commission Company, say so, that settles experience as dictator.

We should like to send some of our illustrated grain elevator literature to owners and others interested.

Don't experiment; use the tried and sure service paint, **FIRST QUALITY** only. Don't waste labor by using "cheaper-per-gallon" paints. You will have to paint oftener if you do that.

What of the Future?

AN extract from the speech by the Secretary of Commerce at the banquet of the American Manufacturers' Export Association, on October 31, 1918:

"For the future the veil seems slowly to rise. Does it rise upon a stage on which, instead of a fight for self-preservation, we are free, you and I, now and at once, to enter upon a contest of self-interest? Upon the answer America makes to that plain question depends the international good will of America. Are we free now, you and I, American manufacturers, to go about our personal efforts for our

personal gain and to make the most that we can, as we once properly did, out of every opportunity that may be before us? Are we free so to do?

"We must not forget that much of the freedom of our own land now has been secured in safety and in honor to us by the sacrifices of others, made before we recognized that this was our fight as well as theirs. Take it to heart. They fought, they bled, they suffered, they sacrificed, they died for us. Let us not forget!

"I am indebted to Mr. Otto Kahn for finding a few great phrases from Abraham Lincoln which so strongly put the spirit of the time. 'You can not, if you would, be blind to the signs of the times,' said Mr. Lincoln. 'I beg of you a calm and enlarged consideration of them. So much good has not been done by one effort in all past time as in the providence of God it is now your privilege to do. Make the vast future one not to lament that you have neglected it.'"

A Question of the Future

WILLIAM H. CORBIN, the late Vice-President of the Joseph Dixon Crucible Company, once said that the turnover cost of ordinary labor was heavy, but the turnover cost of good foremen and superintendents could not well be calculated, as they were really more important than directors or head officers who so often lack the knowledge and experience of old-time foremen and superintendents.

Lately, Mr. John D. Rockefeller made the statement: "It is the men in it who make the business successful, not the machinery or the plant, no matter how excellent they may be."

Mr. Charles H. Sabin, President of the Guaranty Trust Company, New York, has lately expressed the same idea and he tells us that the old order of things is past, and in the new order new men and new forces will come to the top. He tells us, as others tell us, that the manufacturers, the bankers, the merchants and other business men in every city and town and hamlet in the country must get closer to the people. They must discuss things more freely with the workers.

John D. Rockefeller, Jr., tells us that we must consider the brotherhood of man. We must at all times be fair and just. We must not be domineering simply because the man may be hired by us. That man should not be made afraid of losing his bread and butter. We must all pull together, boss and man, for very likely the boss himself has someone above him that he in turn may fear.

In the Guaranty Trust Company it is the main duty of one of the Vice-Presidents to see that the entire force of 1800 people is kept contented and happy. Mr. Sabin, the President, does not look for perfection. When asked what he thought of 100% men, he said: "The only 100% men are dead. A man is worth his net value and some allowance must be made for us all. The higher the man's average, the greater his value. There is a certain amount of pay dirt in every man, and it is the job of the executive to work that streak of pay dirt as long as it is profitable and no longer."

Above all, we must pull together if we expect to win anything and we must recognize the force, value and power of organized labor.

In olden days a foreman or a superintendent or a manager who could not get along with a worker, "fired" him and no one raised a question. To-day the man who cannot handle men without friction is considered unfit for his position.

Pulp and Paper Mills

MANAGERS and superintendents of pulp and paper mills of New York and other states can testify that Dixon's Silica-Graphite Paint gives the longest and best service on metal and wood surfaces and on the digesters, which are difficult to protect because they are subject to attack by sulphuric acid.

Two flumes of a large pulp mill (name on request) in New York State were painted ten years ago with Dixon's Paint. Recently they were painted again with the same material, which is a sufficient testimonial and a sufficient economy service record. These two flumes are one and a half miles long, three-quarters of the length exposed to all weather conditions and covered with ice and snow from three to four months each year.

If partitions around or near the digesters are given two or three coats of Dixon's Silica-Graphite Paint, it will give them double life.

One of our experts on paint for pulp mills visited a bleachery several years ago. The superintendent took him through the bleach room. Our representative noticed that the woodwork was rotten and pulpy, the heads of the nails eaten off, the putty in the windows falling out, and the steam pipes a mass of rust. The superintendent stated that he knew of no paint that would prevent this. This concern was building a new bleachery and our representative suggested that he paint the inside with Dixon's Silica-Graphite Paint. This was done and remarkable service given.

Dixon's Paint is the best paint to prevent attacks by acids, brine, dampness, abrasion, gases, dust; equally suitable for metal or wood.

Save waste of labor and material by using Dixon's Silica-Graphite Paint. It lasts longer and costs less per year of service.

Letters from the House

(No. 2)

IN a previous issue, we had an extract from an interesting article found in *Printers' Ink*, week of June 27th, relative to the kind of letters a salesman likes to receive and the kind of letters he should get. We now add to that the following:

"A man who has been with a house several years is expected by the better class of trade to really know not only his line but something about his business in general, and where is there a better place to learn those things than through the right kind of letters from someone in the house who knows the facts?

Do you know why most of us are backward in talking up advertising? Well, do you know that the old man himself didn't know anything about this combination of advertising and merchandising and marketing until he got in touch with advertising men who knew that subject? It took him some time to get the hang of it himself—to really understand it so that he could enthuse over it sufficiently to put his money back of it. Now, we on the road can't get out and enthuse over a thing like that when we don't know much about it. Just a portfolio and a lot of proofs and a letter from an advertising manager that these advertisements are going to create tremendous demand don't give us the real underlying facts that an honest and conscientious business man must have before he can go out and talk those things as they should be talked. Some houses think that their salesmen are antagonistic to

advertising or simply too lazy to talk it up, but the truth is that those salesmen have never had the meat of the case, they don't know the why of the house's advertising policy and they don't know how to talk it. Consequently, they follow the lines of least resistance and talk the line in the old way—price, competition, quality and service. Let the head of the house or someone who knows give us a chance to get onto the inside of some of these things and we can talk to better advantage."

Don't Be Selfish

IF you have the mistaken idea that by keeping all of your knowledge and ideas to yourself you are so much better off than the other fellow, the sooner you get rid of that idea the better.

The idea that giving away knowledge makes a man poorer, and that withholding it makes a man richer, is a mistaken idea.

In the early days of automobiling, the driver sometimes found out some little thing that enabled him to speed up a little or to get a mile or two more out of his gasoline. At first, he kept his knowledge to himself, but later on, when he became more sociable with his fellow drivers, he learned they had some little "kink" that was helpful in driving and then it was found that in exchanging ideas they were better off; none was the poorer.

Some people, like the story in the Bible about the candle, keep their advice and ideas under a bushel. They say, "Let him go in and find out for himself." Such men never get very far in the long run. They usually find themselves in a "pocket" and the other fellows going around them.

It is said that firms are often forced to spend hundreds and thousands of dollars to find out what some other group of men already know.

Executives should encourage their superintendents to associate with other superintendents and to exchange information. They will be none the poorer because there is some person who knows just as much as they do and it is not going to cut the ground from under their feet because they helped some other fellow or exchanged information.

Some years ago one of the superintendents of the Dixon Company had been trying to accomplish something in the way of a mechanical device. The Dixon Office, to help him out, had been in correspondence with two of the best known machine concerns in the country. It was found possible to make such a device at the cost of somewhere near \$500. The superintendent had been on a business matter down East and while waiting for a train walked into a wood-working concern, made himself acquainted, and being a fellow manufacturer, was able to give the men what they considered one or two ideas in regard to their machinery and, in return, he found that they were making use of the very device or something like it which he had been struggling to find out about. The result was that when he came home, with the aid of his own machinists he was able to accomplish at a cost less than \$25 that which two well known mechanical concerns were able to furnish only at a cost many times that.

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Mr. A. A. Jones, Ch. Engineer, Hotel Touraine, Boston, equipped his engines some time ago with Winans Dry Graphite Lubricators for feeding Dixon's Flake Graphite to the cylinders. Since that time he has saved almost exactly 50% of the previous oil bills; in other words, a barrel of cylinder oil now lasts as long as two barrels did before.

The Drift Toward Big-Gauge Selling

SALES MANAGEMENT calls attention to something that every manufacturer may well take to heart. It recalls the fact, as reported by the United States Department of Commerce, that in many industries the number of manufacturers has very largely decreased, while the value of the product has very largely increased.

In the matter of watches alone, the decrease in the number of manufacturers from 1869 to 1914 was 60%, while the increase in number of watches manufactured was over 400%.

In the number of manufacturers of soap in ten years, the decrease was 15%, while the increase in products was 87% in value.

Sales Management wisely says that "business prophecy, while fascinating, is a dangerous occupation, and an admirable job to leave for the other fellow.

"So we will not venture any predictions as to what 1919 may or may not hold in store for our readers. But we are going to hazard one guess. So far as we can observe, the next five years will see a decided drift toward large scale selling, with an increased output being marketed by fewer sales organizations."

In other words, if we drift toward large scale selling, executives of industries will need very carefully to study conditions and they will need carefully to organize their selling forces and get their organizations into the good shape that Tammany is said to have its organization.

In other words, to have in hand the thread leading to every part of their possible territory and absolutely to know the possibilities of every part of the field and have that part of the field covered if worth while; if not, then direct attention to those parts of the field that are the profitable parts.

To Calculate Profits

HERE is a schedule of profit calculations which may be found useful by the average business man. It shows, for instance, that 5 per cent added to the cost of an article is equal to a $4\frac{3}{4}$ per cent profit on the selling price.

Addition to cost	Profit on Selling Price
8½ per cent	7 per cent
10 per cent	9 per cent
12½ per cent	11½ per cent
15 per cent	13 per cent
16 per cent	14¼ per cent
17½ per cent	15 per cent
20 per cent	16⅔ per cent
25 per cent	20 per cent
30 per cent	23 per cent
33⅓ per cent	25 per cent
35 per cent	26 per cent
37½ per cent	27¼ per cent
40 per cent	28½ per cent
45 per cent	31 per cent
50 per cent	33⅓ per cent
55 per cent	35½ per cent
60 per cent	37½ per cent
65 per cent	39½ per cent
66⅔ per cent	40 per cent
70 per cent	41 per cent
75 per cent	42⅔ per cent
80 per cent	44½ per cent
85 per cent	46 per cent
90 per cent	47½ per cent
100 per cent	50 per cent

—Brass World.

The Salesman

SOMEONE has called our attention to the number of books on salesmanship, not only on personal salesmanship, but sales letters as well.

At the present time there seem to be almost as many books on how to sell goods as there are ideas of how to live this life and be rewarded hereafter.

The time has now apparently come when it is up to some of us to learn how to dodge the salesman. The *New York Sun* tells us that no sooner does a student of commercial practices and tendencies discover a new and ingenious method of detaching money from a citizen than he rushes off to a convention of his rivals and bestows on them without price and with appealing modesty the fruits of his enterprise, observation and superior skill. There are books and orators now that tell us the trade secrets which made Sellem a success while Failup is searching for a blank petition in bankruptcy. Not one of the many books advertised, and not one of the many speakers who speechify, fail to make use of that wonderful word "psychology," and the words "the psychological moment."

All in all, the wonder is expressed if the ultimate consumer has no rights in the matter.

Would it not be well for the consumers of the world to organize, for against them the most elaborate engines of uncalculated selling power are equipped?

There are schools for salesmen of all kinds, from purveyors of wearing apparel to the venders of second-hand sewing machines. The grocer's clerk is trained to delay the wrapping of half a dozen lemons while he insinuatingly praises to-day's special in "near-flour."

There are shops in which the legitimate acquisition of a single collar involves a lengthy explanation that you do not want a bathrobe or an outdoor sleeping bag. The innocent, endeavoring to meet the primary necessities of life in food and clothing, anxious about the next payment on his Liberty Bonds, trying to lay aside a few dollars to gratify his natural instinct to do his duty by the Red Cross, and conscious that his insurance premium is due, is beset by eager salesmen who possess every advantage of specialized instruction and are deep learned in the lore of lure.

They are competent to read his thought, to tickle his vanity, to obscure his financial difficulties by honeyed words and well judged deference. He, poor wretch, longs to live up to the high reputation they force upon him. Fine words butter no parsnips, but they sell a lot of goods.

The *New York Sun*, in its liberal way, strives hard to tell us how to escape the highly trained and specialized salesmen trained not only to empty your pocketbook, but to insist that you shall take off your shoes to show you have not a spare dollar laid away for a rainy day or to buy your ticket for home.

Beans

WE are urged to make use of beans, which are to be counted as a substitute for meat rather than for cereals. They can well take the place of a meat dish on many occasions. Certainly with them in the diet there is less need for meat. In caloric value one pound of beans is equal to over five pounds of potatoes, one and one-half pounds of sirloin steak, two pounds of round steak, one and one-half dozen eggs, or five pints of milk. The protein value of beans runs in the neighborhood of 22%.

Boston baked beans have taken the place of meat in certain meals for a large section of the country for many years. Bean loaf skilfully made can hardly be told from meat loaf.



PEOPLE who have come to know the above trade mark from actual experience and use of Dixon's Graphite Products, know what that trade mark means.

They know that back of that trade mark is a story of experience and honor in making graphite products. Beginning away back in 1827, when Joseph Dixon, the founder of the Dixon Company, began the manufacture of Dixon's Stove Polish and Crucibles, he made it a point of honor to make one quality only and that of the very highest. Whenever he found it possible, he improved his goods. At that time, Joseph Dixon also began the manufacture of lead pencils, but never went far enough to establish a position, although he made as good a pencil as any that were made at that time.

Foundrymen who make use of Dixon's Crucibles for melting steel, brass and other materials, know that the above trade mark means that the very best materials have been used and that the highest degree of skill has been worked into the crucible.

The same may be said of Dixon's Graphite Lubricants, Dixon's Silica-Graphite Paint, Dixon's Lead Pencils and all other goods that are branded with the above label.

NOT in the clamor of the crowded street,
Not in the shouts and plaudits of the throng,
But in ourselves are triumph and defeat.
—Longfellow.

A SMALL boy was asked what he understood by "celerity." He had evidently had experience, for he promptly answered, "something to put hot plates down with."

Six Years' Roof Service

GEORGE H. WILSON, President of the Wilson Canning Company of Mexico, N. Y., and Taberg, N. Y., writes us as follows:

"I used Dixon's Silica-Graphite Paint six years ago on the roof of my residence. I like the service of your paint so much that I have ordered some more for use this Fall again.

"I call Dixon's Paint all right, far better than other paints sold for that purpose. "Yours very truly,

(Signed) "GEO. H. WILSON."

Brevity

OF all the odd letters that are received, the following takes the honor of being more to the point in the fewest words than any other.

"Kind Sir:

"Having received your Stove Polish thanking you very much was glad to get it try other stove polish don't do the work as your Polish."

Paint for Army Trucks

DIXON'S Silica-Graphite Paint has been used satisfactorily on the army trucks at Camp Raritan, Metuchen, N. J., for the purpose of protecting the underbody, mudguards, etc.

As farmers, contractors, and others very often leave their trucks unprotected, they should, therefore, secure that protective paint which gives the highest standard of service against wear and weather.

Dixon's is the best paint for this purpose.

In buying paint, owners would do well to specify that Dixon's Silica-Graphite Paint should be used, and when repainting is necessary, there is

none equal to Dixon's.

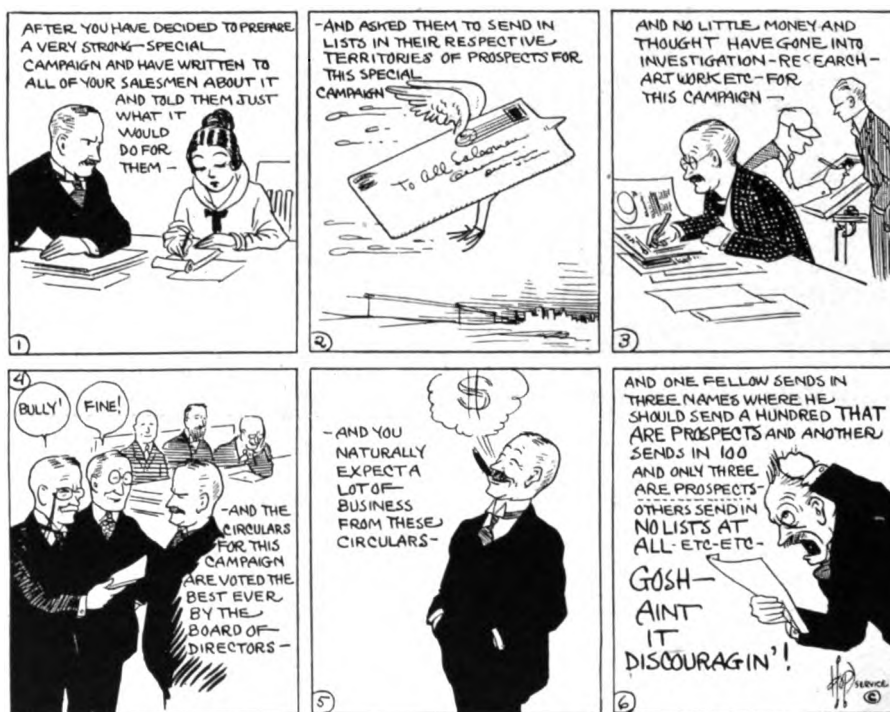
"Paint and be done with it when you use Dixon's Silica-Graphite Paint" is the Dixon Company's well-known slogan.

Remarks of the Generals

SAID General Discontent: "I cannot find a protective paint that goes over the top, wins and holds where put for any length of time."

General Satisfaction replied: "Dixon's Silica-Graphite Paint can be relied on. Try it in your most difficult paint campaigns; attacks of wear or weather; under exposure of metal or wood; unexpected conditions of service; this old veteran defeats time, expense and trouble, and gives you the final victory over deterioration."

Ain't It Discouragin'?—Hopkins



Living in India

LIVING in India means keeping a continual outlook for snakes and wild animals. During 1917, snake bite caused the death of 23,918 persons in British India, an increase of nearly 300 over the figures for 1916.

However, in 1917, they killed 73,968 snakes, against 65,765 in 1916.

There were 2176 persons killed by wild animals in 1917. Tigers killed 1009, leopards 339, wolves and bears 280, elephants and hyenas 89. Of the 459 deaths caused by "other animals," 89 are assigned to pigs and 199 to crocodiles or alligators.

England pays bounty for the killing of snakes and wild animals.

CYLINDER LUBRICATION

Use Flake Graphite for Cylinders and Cut the Cost of Lubrication in Two

Dixon's Flake Graphite forms a wonderfully smooth anti-friction veneer over the interior of the cylinder.

It furnishes better lubrication than can possibly be obtained by oil alone. With it you not only use less oil but a cheaper grade of oil.

DIXON'S FLAKE GRAPHITE

will restore cut and scored cylinders and valves to perfect smoothness. Such incidents as sticking and groaning valves disappear entirely. Rod packings last indefinitely.

Nothing equals it for lubrication in connection with superheated steam. Temperatures that vaporize oil have no effect on graphite.

Power plants that use Dixon's Flake Graphite report savings of 50% in the cost of lubrication.

Send for Booklet No. 190-C telling more about this lubricant and method of successfully feeding dry graphite into cylinders.

Made in Jersey City, N. J., by the

Joseph Dixon Crucible Company



Established 1827



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Graphite

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NO. 3



JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED 1827 Jersey City, N. J., U. S. A. INCORPORATED 1868

**Miners, Importers and
Manufacturers of Graphite,
Plumbago, Black Lead**

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FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS

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FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS
Canadian Asbestos Company, Montreal, Quebec, Can.

Not just an artist's pencil—

Nor merely a
draftsman's pencil—

Nor only a general
business pencil—

But—
a pencil that eases
and quickens work
for everybody

DIXON'S ELDORADO

"the master drawing pencil"

is an American Achievement in pencil making. Leads delightfully smooth, scientifically graded, and exceptionally long wearing. The Eldorado makes for genuine economy.

Made in 17 degrees

9 H (hardest), 6 B (softest),
H B (medium) for general use.

Get a trial dozen from your dealer, or send 10c for a full length pencil mentioning your dealer's name and whether very soft, soft, medium, hard, or very hard lead is desired.

JOSEPH DIXON CRUCIBLE COMPANY

Established 1827
Dept. 190-J Jersey City, N. J.
Canadian distributors, A. R. MacDougall & Co., Ltd., Toronto, Ont.



"Of all the various uses to which a lead pencil may be put, I believe the

requirements of the photographic negative retoucher to be the most exacting," says a noted photographer of Newport, R. I.

From the other side of the continent—Eureka, California—comes a statement from a nationally known artist-photographer, Emma B. Freeman: "I find the ELDORADO Pencils the very best I have ever used for retouching and also for sketching on photo prints." Elsewhere in this issue we reproduce Mrs. Freeman's letter complete, while the front cover shows a portrait study made at the Freeman Studio. This portrait was retouched with Dixon's ELDORADO—"the master drawing pencil," and the artistic sketching in the reproduction shows the possibilities in photographic work of one of the soft degrees of the ELDORADO.

We might quote from still another letter—this time from a Southern photographer who has used retouching pencils of every brand, foreign and domestic, for a great many years. This user's enthusiastic comment is: "The ELDORADO cannot be surpassed as a *blender* for negative retouching, and I cannot imagine a retoucher using any other pencil *after having tried* your ELDORADO; it will seem like a discovery to him." He asks the Dixon Company to accept his thanks "as a tribute from an old retoucher in appreciation of your

The Possibilities of Pencil Work in Photography

having created for his craft a perfect medium to enhance their crafts-


manship." Naturally this is gratifying.

In directing attention to Dixon's ELDORADO for retouching, we recognize the accepted fact that retouching is not drawing but is blending, and that the ideal pencil for the work must produce a soft "fused" result, and yet have sufficient "tooth" to do so on smooth and semi-smooth surfaces as well as on rough surfaces. We also recognize the ideal retouching lead must be highly responsive, to permit of rapidity in the performance of artistic work, almost without conscious effort. All of these characteristics, together with strength and long-wearing quality, are combined in the ELDORADO leads.

May we conclude by stating that there is no "mystical" quality in Dixon's ELDORADO—"the master drawing pencil," which distinguishes it as the dominating pencil among photographers and other professional classes of pencil users, including Artists, Architects, Engineers, Designers, etc.? It is merely an expression of the highest achievement in the art of pencil-making, embodying a *super-balance* of the essential qualities. These qualities make for the same easy, rapid and effective result in all general or special pencil work as in the professional activities mentioned. Wherever a higher value is placed upon time than upon the price of a lead pencil, the ELDORADO may be used with genuine economy.

RETAIL WHOLESALE PHONE 2808

Freeman Art Co.
Eureka, California



Bureau, Calif. Oct. 28, 1918

Joseph Dixon Crucible Co.
125 Second St.,
San Francisco, Calif.

Gentlemen:

Enclosed find order for quantity of your ELDORADO pencils. I find that these pencils are the very best I have ever used for retouching and also for sketching on photo prints.

I am pleased that an American firm has made an American pencil which is far superior to the imported ones. You may rest assured that the ELDORADO will be the only one used in my studios hereafter. Thanking you for promptness in filling orders, I am

Sincerely,
Emma B. Freeman
EMMA B. FREEMAN

ALL OUR STUDIES ARE PRINTED ON ARTURA 1000 PAPER

ELDORADO Helps Famous Artist-Photographer

WE reproduce on this page a letter in which one of the best known artist-photographers of the country, Mrs. Emma B. Freeman, of California, expresses the satisfaction she finds in using ELDORADO for retouching and sketching on photo prints.

Mrs. Freeman's studies have been reproduced in leading publications such as *Leslie's*, *The Illustrated Review*, *Studio Light*, *Sunset*, *Camera Craft*, *Overland Monthly*, *Pacific Outdoors*, etc. She has in the Field Museum in Chicago a collection of Indian studies numbering 200, the artistic merit of which is attested by their purchase by the authorities of that discriminating institution.

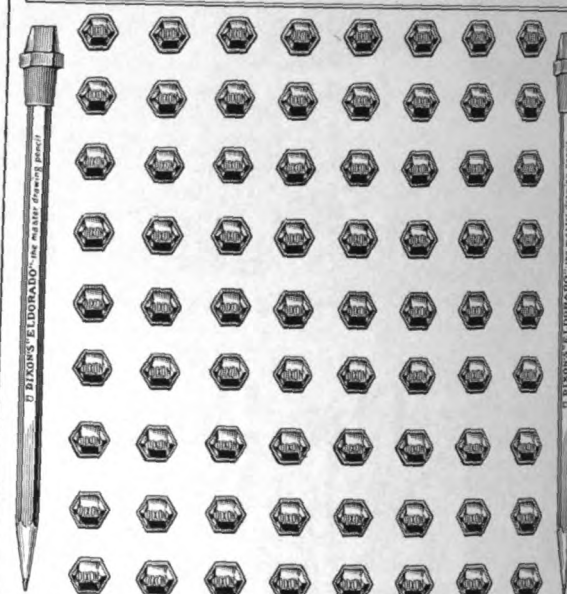
When Mrs. Freeman says that she finds ELDORADO best for her purposes, unusual weight attaches to the testimony. Her letter means in short that Dixon's ELDORADO—"the master drawing pencil" is a fast, easy running pencil, with a quality of adhering in just the right way to any photographic paper surface; it means that the ELDORADO is fine grained and firm—that it will not crumble but that it will mark in the way desired by the photographer; it means that for retouching, photo sketching, spotting, lettering and numbering negatives, Dixon's ELDORADO—"the master drawing pencil" gives supreme satisfaction.

BUTTERFLIES are beautiful, but no one builds hives for them.

A BOOK, though mainly as the Writer makes it,
Is also largely as the Reader takes it.
EXCUSES are the patches with which we seek to repair the garment of failure.
—Y. C. Bulletin.

DIXON'S "WEDGE" ERASERS
No. 450-C
(Patented)

SERVICEABLE ECONOMICAL



Made by JOSEPH DIXON CRUCIBLE CO., Jersey City, N. J., U.S.A.
ESTABLISHED 1827

New Packing for Wedge Eraser

WE have referred a number of times in these columns to Dixon's patented Wedge Eraser and the trade will be glad to learn that this exceptionally practical erasive rubber is to be offered on cards, a half gross to a card as illustrated.

To recall a few of the points of excellence that have been attributed to this eraser, perhaps the first would be its generous size, which means, according to users, that it will outwear at least three pencils; second, its serviceability, where a generous amount of erasing is to be done; third, the fact that it slips over any untipped pencil, or over the worn out inserted rubber of a tipped pencil; fourth, that it will keep a round pencil from rolling on a sloping surface and will help keep a pencil so equipped from falling out of the pocket; and fifth—if we need any more points of recommendation—the 450 Wedge Eraser on the end of a pencil is exceedingly handy when riffling over papers, in which work it takes the place of a rubber finger.

The new packing is two cards, or one gross of erasers, to a box; and as the pencil illustrated on the card, the ELDORADO, is now carried by most high class stationers to their material profit, this 450-C eraser card will be another advertisement for that pencil as well as for the eraser. Of course those not yet stocked with the ELDORADO can sell the 450 eraser for use on any pencil as mentioned above. Dealers who have handled these Wedge erasers for some time say it is an easy matter to sell a quantity to anybody buying untipped pencils—and the untipped pencil has the call in an exceptional measure at present.

(No. 450 is the new number for the familiar red rubber Wedge Eraser known in the past as No. 451½.)

Dixon's 677 Helps to Defeat the Hun in the Argonne Drive

DUE to Government Regulations we have not been able to say much as to how Dixon's Products were helping to defeat the Hun. But here is part of a letter received from the other side that is of more than passing interest to all.

This letter was written to one of our salesmen by a friend of his who took part in this famous drive that made history for the world.

"You will be interested to know that back in the Argonne drive we were short on grease for the shells. Our Supply Sergeant found a can (25 pounds) of Dixon's 677 and we used it all the way through to our last position on the right of the town of Apremonte. When you consider the fact that in our first position alone, our battery fired over 4500 rounds and in moving up took six different positions, and in each position firing anywhere from five hundred to fifteen thousand rounds, you will know that your grease played a prominent part in pushing back Fritz."

We are, to say the least, glad that we have had our part in "making the world safe for democracy."

Dixon Graphite Automobile Lubricants Help to Win

WE have in these columns published letters from various racing drivers testifying as to the value of Dixon's Graphite Automobile Lubricants as an aid to their racing. Here is another recommendation to the same effect:

KANSAS CITY, MO.,
Dec. 3, 1918.

GENTLEMEN:

Would appreciate very much if you would send us a set of pictures of the various racing pilots who use Dixon's Graphite Automobile Lubricants as I wish to put them up in our garage and sales room which we are opening in this city.

I have used your lubricants in both my Duesenburg and Mercer cars and have found nothing to beat them. My racing has been confined mostly to the Coast and Central West and I credit the stability of my car in many a successful race to your lubricants.

Very truly yours,
FLOYD F. BOWEN.

A Testimonial for Dixon's Pioneer Boiler Graphite

THE following received by us is evidence of the worth of Dixon's Pioneer Boiler Graphite as a means of removing boiler scale:

ST. LOUIS, MO., Jan. 7, 1919.

GENTLEMEN:

It has been our plan to give no letters of testimony. However, it is needless to say that Dixon's Pioneer Boiler Graphite is giving us entire satisfaction, as we have been using it now for over three years.

We will be glad to answer inquiries as to the value of this article should you refer any prospective customers to us.

Very truly yours,
(Name on request).

Death Comes to W. V. Turner

WE learn that Walter Victor Turner, manager of engineering at the Westinghouse Airbrake Company, who rose from a Wyoming sheep herder to be almost a second Westinghouse and one of the foremost authorities on pneumatics, died in January, 1919, at a Pittsburgh hospital following a general breakdown in health.

Mr. Turner had more than 400 inventions covered by patents in use on railroads and in large industrial plants. He did more for the speeding up of railroad travel, with a resultant decrease in accidents, than any other man in this or any other country. He was always a strong advocate of graphite and developed the idea of using only the highest grade dry graphite on triple valves.

The story of his life reads stranger than a motion picture scenario. Born in England, he came to this country in 1888 and settled in the West. While on one of his rounds as manager of a large ranch, he came across a train wreck and a piece of airbrake caught his eye, and, taking it home, he studied the principle of the mechanism.

After traveling around, he finally located with the Atchison, Topeka & Santa Fé railroad and developed his first patent. His ability as an inspector of motive power was soon established and he was placed in the shops, where he improved the Westinghouse airbrake.

While attending a convention in Pittsburgh in 1902, Mr. Turner was offered a position with the Westinghouse interests, but he declined. A year later he accepted another offer from the same company.

Among the several awards given to Mr. Turner for his engineering inventions were the Longstreth medal in 1911, the Elliott Cresson medal in 1912, and other honors as an engineer.

David R. Daly

DAVID R. DALY, President and General Manager of the J. H. Gautier Company of Jersey City has passed over to the other life.

He went into the employment of his company at the age of 10 years and at his death was in his 65th year. In all of his 55 years of activity he had known of no other employment and was in all probability the oldest crucible manufacturer in the world.

A better posted man on the making of crucibles, or a more entertaining man in crucible lore, one could not find.

Mr. Daly was a type of an ideal citizen. He not only endeavored to build up an industry in the city, but took as well a deep interest in all civic matters. He was Vice-President of the Hudson County National Bank, trustee of the Provident Institution for Savings, and treasurer of the Free Public Library Trustees. He also took a deep interest in his church, which was the Second Presbyterian Church of Jersey City.

At his funeral the Chamber of Commerce, the Hudson County National Bank, Free Library trustees, Union League, Downtown Club, the Historical Society of New Jersey, the Board of Education, the Home for the Homeless, and other business and civic bodies with which he was associated were represented largely.

As a friend and as a fellow manufacturer we always found Mr. Daly a man of unusual faithfulness and integrity.

"A JOB FOR EVERY STAR"

THE boys are coming back, and in accordance with the promise made to them by President George T. Smith when they entered the United States Service, they are being assigned to a position at least as good as that which they left.

The following have returned up to the present:

HENRY STEFFENS, *3rd Engineers Training Regiment, Cost Accounting Department.*

JOHN O. ROLLINS, *United States Navy, Purchasing Department.*

VINCENT PETRIE, *United States Navy, Cost Accounting Department.*

A. K. SUTTON, *Machinists' Mate, Naval Aviation, Auto. Lub. Sales Department.*

THOMAS WILSON, *47th Battalion United States Guards, Brass Factory.*

FRANK SPINELLO, *3rd Engineers Training Regiment, Driver.*

JOSEPH HUMMILL, *Ordnance Dept., Headquarters Co., Driver.*

THOMAS EVANS, *16th Infantry Battalion, Pencil Factory.*

HARVEY RAGAN, *United States Navy, Lubricating Sales Department.*

FRED BIRK, *3rd Chemical Battalion, Laboratory.*

WARREN BUDD, *S. A. T. C., Columbia University, Pencil Department.*

THOMAS A. MOORE, *S. A. T. C., Fordham University, Cost Accounting Department.*

NORMAN McDONALD, *Royal Flying Corps, Brass Factory.*

ANGELO VERTUCCI, *Pencil Factory.*

The Name ELDORADO

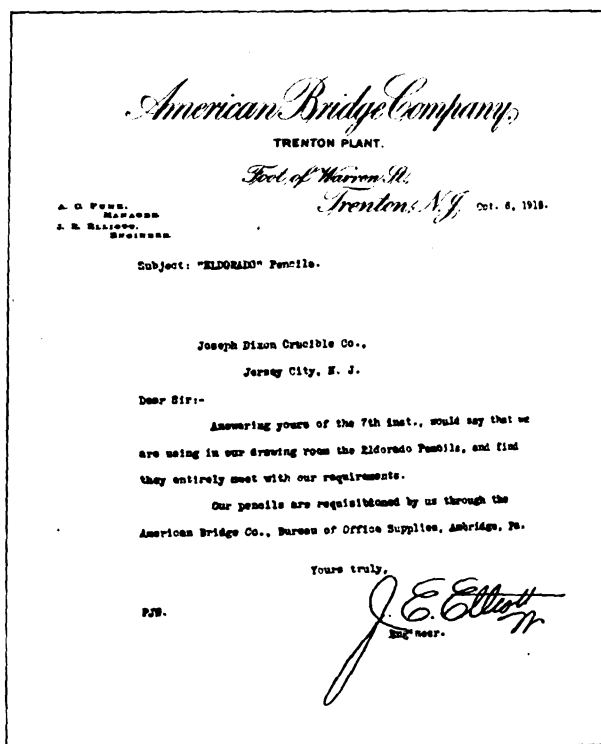
LOOKING over the *Gazetteer*, it is interesting to the makers and users of ELDORADO pencils to know that in over one-third of the states in the Union—nineteen states to be exact—there are found communities bearing the name ELDORADO. We can probably safely say that there is no important town in the country in which there are not to be found pencils bearing this name.

Naturally the name is most popular in the West, for the meaning of the word, which is Spanish, is "the Golden One"—which readily becomes "the Place of Gold" and hence was often applied to mining towns. The word ELDORADO has oftentimes signified nothing more than a lucky strike, but in the case of the ELDORADO pencil any good fortune in the producing of this pencil was attended by the amount of exceptionally hard work that is commonly the accompaniment of any real stroke of "luck." It was only the most patient "digging" that enabled the Dixon Company to place the ELDORADO pencil in the hands of technical and business men and fine pencil users of every class at a time when quality pencils were needed as never before.

The Dixon Company appreciates that it was exceptionally favored in having associated with it men capable of first visioning and then producing the ELDORADO, which is now characterized as one of the American achievements of the War period; and it likewise gladly acknowledges its deep indebtedness to the trade and to the American consumer who gave the pencil the prompt vigorous support without which the finest article is quite valueless.

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DETERMINATION reduces hard work to nothing; procrastination makes hard work out of nothing.



From the Largest Bridge Company in the World

AS indicating the position which Dixon's ELDORADO—"the master drawing pencil" has reached in the world of industry, as well as in the world of art, education and general business we reproduce on this page a letter from the American Bridge Company, the foremost bridge builders in the world.

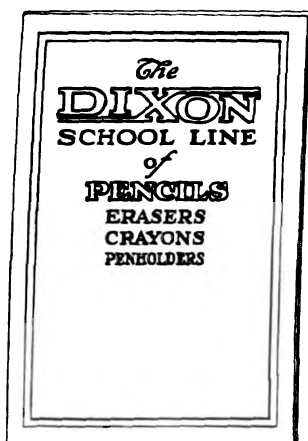
Our reason for reproducing this letter is not that the patronage, through the trade, of the large user is prized above that of the smaller organization, but to point out by these "high spots" in the field of ELDORADO advocates the superior results that pencil workers in any line and associated with whatever size of organization may look for in adopting ELDORADO, in that those accustomed to scan their purchases most critically have approved this pencil.

If you haven't a dozen ELDORADOS on your desk or drawing board at this time, by all means, in fairness to your work, get a trial dozen, of one degree or assorted degrees, from the nearest dealer.

New ELDORADO Circular

THE leading article in June GRAPHITE elicited so much favorable comment that it seemed desirable to put the information contained in it into permanent form. Accordingly the brief statement describing the extreme care used in the manufacture of the ELDORADO pencil has been reprinted in the leaflet shown here, bearing the query "Does it Ever Occur to You?" on its face and on the back panel of the leaflet information as to the degrees most popular with various classes of pencil users.

Because of lack of suitable printing surface this insert is not imprinted, but a quantity will be supplied to any ELDORADO dealer desiring to distribute it to his trade for the value that this presentation of the subject may afford him.



New School Catalog

WE know of no better way to present our new catalog of the Dixon School Line of Pencils, Erasers, Crayons and Penholders than to repeat the preface contained therein, as follows:

"The Dixon School Line, as set forth in the following pages, is the result of a steady growth, covering many years. It is the achievement of our specially organized School Department,

which has been maintained by us for more than a quarter of a century.

"Superintendents and Principals, Primary, Drawing, Penmanship and Commercial Teachers have shared in the making of the Dixon School Line. We may say, therefore, that the Dixon School Line is in a true sense the product of our Model Pencil Factory and Equipment working in co-operation with the progressive Educators of the land through our School Department.

"It is fitting for us here to render our thankful acknowledgment of the kindness and interest which have been manifested by these Educational Experts in our development of proper School Pencils, Rubber Erasers, Colored Crayons and Penholders; and to add, moreover, a word of appreciation of the widespread recognition accorded the Dixon School Line by school authorities generally."

The catalog—a beautifully done piece of printing—shows our School line in the actual sizes and colors. Copies will be cheerfully sent to those interested. Ask for 190-SJ.

Florists! "Dixon's Silica-Graphite Paint for Tree Surgery and Pruning"

DIXON'S Silica-Graphite Paint is used by florists, nurserymen, and superintendents of botanical gardens for many purposes, such as steam and hot water pipes, boiler rooms, plant protection, smokestacks, boiler fronts, etc., and for tree surgery and pruning.

We now quote a testimonial letter received from one of the leading nurserymen in the Southwest. Dixon's is the most famous of dampness-resisting paints.

C. V. NURSERIES

J. WILLIS TETRICK, Proprietor.

BLACKWELL, OKLA.

We use Dixon's Silica-Graphite Paint, Dark Red, in tree-surgery and pruning tests, where the paint has to meet conditions of dampness. We are delighted with the results and durability, and can recommend your celebrated paint in this new field. We are well pleased with its weather-proof qualities, which are very necessary in pruning as well as tree surgery.

We used Dixon's Dark Red, but any of your four colors will do.

C. V. NURSERIES,

(Signed) J. WILLIS TETRICK, Prop.

Getting Together

MR. WILLIAM M. CRANE, President of the William M. Crane Company of Jersey City, says:

"Several years ago we adopted at the factory, aside from the daily conference, a bi-monthly meeting of the foremen and heads of departments, presided over by our General Superintendent. At the close of business, at 5:30 o'clock, the day of the meeting, we serve a good supper in the office. At 6:45 the meeting is called to order, and then is taken up for discussion and action anything for the good of the business, such as complaints from customers or between departments, the making of new goods, rush orders, etc. At 8 o'clock sharp the meeting is closed and the men, having had their supper, have not lost their evening. We have found this to be one of the most successful means of getting together. It smooths out many misunderstandings and has brought all of our men close together as friends who are gladly willing to help each other whenever needed. It has also developed a loyalty to the Company of which we are proud."

The Dixon Company has found through experience that where a Superintendent has regular meetings of his assistant superintendents, foremen and head workmen, more and better information is brought out in the discussions that follow than he can obtain by conversation with the men singly.

When all the men get together, there is often a bit of competition between them in giving information, and perhaps they sometimes unlock from their bosoms information of value to the Company that they might not be led to give in ordinary conversation with their Superintendent.

Burlington Grain Elevator, St. Louis, Mo.

PAINTED with Dixon's Silica-Graphite Paint in 1909-1914, and it is still in good condition.

Here is a service record of 7 years at first painting and 5 years up to the present time. We quote the following letter from the Charles Latta Painting Company:

"We are glad to be in a position to recommend Dixon's Silica-Graphite Paint. In 1909 the Burlington Elevator was to be painted and the contractor, Mr. L. J. Evans, requested that Dixon's Paint be used. The contract was awarded to us.

Again in 1914 we repainted it with Dixon's Silica-Graphite Paint.

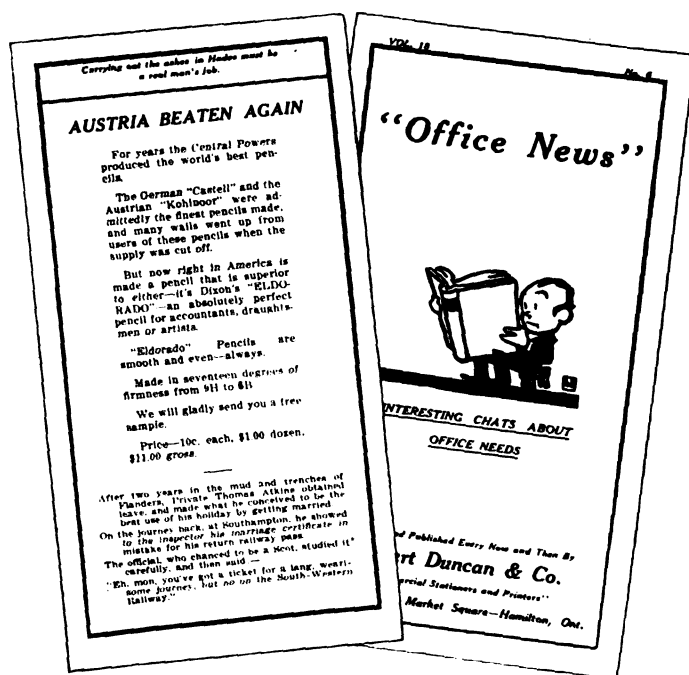
This elevator is located on the river front and is subject to moisture, sea air, etc., and your product has shown that it is able to withstand climatic conditions occurring in this location."—Charles Latta Painting Co.

The general use of Dixon's Silica-Graphite Paint for protecting the huge grain elevators on the seaboard, along the Great Lakes and throughout the West is well known. The conditions of dust, weather and wear in elevator service are severe, but Dixon's Paint never fails when properly applied.

Owners specify Dixon's Silica-Graphite Paint because it saves in labor and material (lasting longer) and because it is guaranteed highest quality paint.

Nearly every locality has a visible Dixon testimonial—an elevator, tank, bridge, smokestack, etc.—painted satisfactorily for long periods of protection.

Don't buy paint "by the gallon," but by "service record."



An Expression from Our Friends Across the Northern Border

IT is particularly pleasing to us to have the thoughts which must be in the mind of every American ELDO-RADO user stated so clearly in the publication of a Canadian house of exceptional standing, as shown by the reproduced pages of *Office News*.

The plain facts of the case are that previous to the War no pencil had made a dent in the demand among discriminating users for the European brands. Every American user wants a pencil of home manufacture, provided he can get the quality that his exacting work requires. ELDO-RADO was pronounced "equal or better" than the foreign pencils by the best judges of pencils that we could find before "the master drawing pencil" was placed on the market. Our records and the statements which we have reproduced from month to month in GRAPHITE show that these critics in rendering their thoughtful judgment on this American-made pencil were as conservative as men of their class would be expected to be in giving such a decision. Only what is put into a pencil can come out of it, and only the most expert craftsmanship and selection of materials could produce a pencil of highest possible quality. The trade and the buying public have suffered no disappointment in relying on the Dixon name.

A Dollar

THERE are two sides to a dollar: the hard-to-get side and the easy-to-spend side.

There is only one side to labor, in this respect: it costs just as much to hire a painter to apply inferior paint as to apply superior First Quality paint.

There are two sides to material: it may be a long-lived or a short-lived paint. The long-lived paint is worth more cents "per gallon." The short-lived paint should not be applied, even though it costs less per gallon, because you waste labor and waste dollars.

Think of Dixon's Silica-Graphite Paint next time you look at the two sides of a dollar and save dollars by saving labor. Labor costs are climbing. Use the paint that, once

on, stays on, and permit your dollars formerly used for wasted labor to stay with you. In this way Dixon's gives you dollars and remember those dollars have Two Sides!

We did not go to Benjamin Franklin for this pointed paint philosophy! Experience was our teacher, or, as our Latin teacher used to say at High School, *experientia docet!* A man may not know Latin, but he should properly know paint if he has anything to do with the protection of exposed metal or wood work.

Dixon's Silica-Graphite Paint is the best service paint in the world. Moreover, it is used as a decorative paint on wooden buildings, the trimming only being touched up more frequently in a lighter color.

Who Was Haym Salomon?

WE are indebted to Mr. Arthur C. Bowles, the Pacific Coast representative of the Dixon Company, for an article from the *New Age*, which is the official organ of the Supreme Council 33° A. & A. Scottish Rite of Freemasonry.

This article tells us that Haym Salomon was born in Lissa, Poland, in 1740. In 1772 he left his native country and settled in New York. At the outbreak of the Revolution he entered the service. After the occupation of New York by the British, in 1776, he was imprisoned as a spy. For a while he was kept in close confinement, but, soon becoming notable for his linguistic ability, he was turned over to the Hessian General Heister for use in the commissariat department. In this position he was given great liberty, of which he made good use by helping French and American prisoners to escape, as well as by influencing Hessian officers to resign their commands. Later on, he applied to the Government for employment and was refused. He then entered the brokerage business and quickly became prominent among the citizens of Philadelphia.

About this time, Robert Morris became superintendent of finance, and his diary attests to how great an extent he relied on Salomon in his financial transactions. Salomon was especially important in the negotiation of bills of exchange, by means of which the credit of the Government was so largely maintained during this period.

It is shown that Salomon advanced to Robert Morris at least \$200,000 which has never been repaid either to him or to his heirs. He also advanced large sums for the individual use of several patriots whose services, without this aid, it would have been impossible for them to continue.

James Madison was one of these patriots and has testified to the great aid of Salomon. It was Madison who said, "Were it not for Haym Salomon, it is difficult to understand how the American Revolution could be brought to a successful conclusion."

In June, 1785, Salomon died, leaving a widow and two children, to whom he bequeathed \$350,000, including, as assets, the debt owing him from the Government, which, however, has never been repaid, neither has his memory been officially honored.

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Dixon's Silica-Graphite Paint lasts twice as long as ordinary paints and saves most money because it saves the expense for labor and material in repainting. Paint once and be done with "upkeep expense" is a maxim alone applicable to Dixon's, which has a record of over fifty years.

Charles C. Van Anglen

THE entire Dixon Office was shocked January 27th, 1919, to hear of the sudden death, early that morning, of their associate, C. C. Van Anglen, Head of the Billing Department.

Mr. Van Anglen became associated with the Dixon Company in December, 1910. Prior to that time he had been in business in Jersey City as a member of the firm of T. C. Brown & Van Anglen, conducting a large department store.

He was known as a man of high character and unfailing courtesy and was greatly respected by all of his associates. His loss will be keenly felt by the Dixon Company and by all of those with whom he worked.

To his friends and relatives the Dixon Company extends its heartfelt sympathies.

The Power of Words

THE *Literary Digest* tells us that the ability of big words to inspire respect, when the same idea expressed in ordinary terms would fail to impress the hearer, has often been noted.

The label on a brand of clay poultice informs the reader that the marvel is "composed of the finest anhydrous and levigated argillaceous mineral."

These words are considerably more impressive than would be the simple statement that the product is nothing more than a dry and finely powdered clay.

Our attention is also called to another "Professor," a shrewd and genial quack who dispensed a pinch each of salt and sugar in hydrant water, \$5 for two ounces. He did not say it in quite the following, but might have used these words with perfect truth:

"My preparation is composed of minimal quantities of a number of the disaccharid carbohydrates, derived from the hexoses and capable of yielding two hexose molecules by hydrolysis, having as a general formula $C_{12}H_{22}O_{11}$, and crystallizing in monoclinic prisms, together with an interesting chemical combination of natrium and chlorin, which, in its natural state, forms anhydrous, cubical, or octahedral white crystals. These are dissolved in a colorless, limpid fluid compounded of hydrogen and oxygen."

The Better Prayer

I THANK thee, Lord, for strength of arm
To win my bread,
And that beyond my need is meat
For friend unfed.
I thank thee much for bread to live,
I thank thee more for bread to give.

I thank thee, Lord, for snug-thatched roof
In cold and storm,
And that beyond my need is room
For friend forlorn.
I thank thee much for place to rest,
But more for shelter for my guest.
I thank thee, Lord, for lavish love
On me bestowed,

Enough to share with loveless folk
To ease their load.
Thy love to me I ill could spare,
Yet dearer is the love I share.

The above verses are taken from *Forbes Magazine* and the editor adds that he considers the writer of the verses the most manly man he has ever met.

He adds further: "There is something about his handshake which makes a man straighten his shoulders. You cannot meet him without instantly feeling his influence. It is as a tonic. He radiates optimism. He invigorates. In his youth he served before the mast. Then he became a minister. His church, although located in a small town, supports, I understand, over twenty ministers, missionaries, and other workers throughout the world. On occasion he tells his congregation that he would like them to contribute an extra thousand dollars for some specified purpose, and the members have never failed to respond, so strong is their faith in him and the soundness of his judgment. He was selected as a member of the original Red Cross Commission to France, and so deeply was he impressed with the need and the opportunity for human service there that, on his return, he was granted leave of absence to go back to France for an indefinite period."

Congress Must Aid

MR. BYRON R. NEWTON, Collector of the Port of New York, at a luncheon of the American Manufacturers' Export Association in the Hotel Biltmore, said that Congress, by legislative action, must aid American business after the war in the domination of world commerce. Every means must be pursued by the United States through the coöperation of big business and Congress for leadership in the trade of the world.

This is no time for an academic discussion of our foreign trade. We are in the middle of the greatest elemental and fundamental revolution and evolution the world has yet known. A new world is coming after this war, and we should look forward to the part we shall play in it.

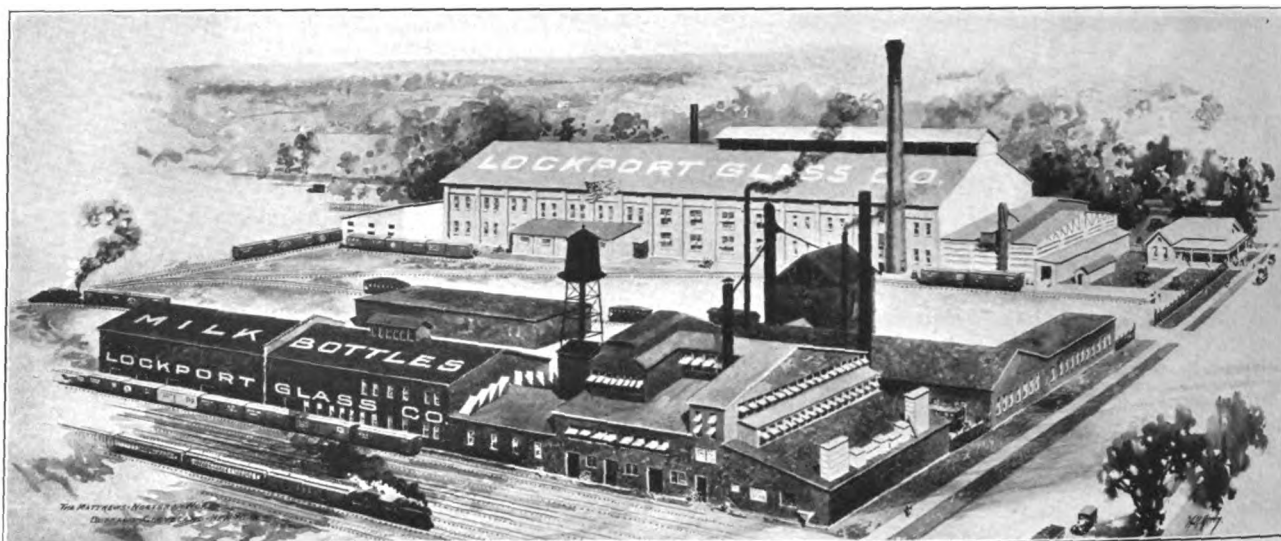
Mr. Newton added that he was asked to say something of the attitude of the Administration toward business and give a word of reassurance for business men, and he said:

"You need have no concern as to the attitude of Washington toward business. I have talked to President Wilson and know he is very solicitous for business and business interests of the United States. In 1914 business men looked upon the Federal Reserve Bank system with concern; they are now convinced of its value.

"The world after the war will be a hungry world. It will need relief, and we must plan how best to give this relief. I would suggest the adoption of the Golden Rule as the after war motto, with the addition of 'Yankee enterprise and push.'

"The world is coming to us for help. Ships must enter into the problem of furnishing the wants of the world. If Congress had had a little more foresight in 1914 and the two following years, while we were trying to put through the Ship Purchase Bill, we would be in a better situation than we are to-day.

"After the war Congress is going to be forced to take a different view of business. Pressure will be brought upon this branch of the Government to make it realize that the United States must take an important place in world affairs. We must get out of the old sphere and assume leadership of world trade. The world wants it and we must give it."



Plant, Lockport Glass Co., Lockport, N.Y.

EVERY day Lockport probably comes to your breakfast table "around the milk," but not broken *in the* milk, as Lockport bottles are A-1, just like the prohibitive paint the Lockport Glass Company uses.

Dixon's Silica-Graphite Paint protects all the dark-colored buildings in the foreground and all the interior metal work. When Dixon's Paint is used, it becomes part of the building; doesn't flake off with dampness, contraction, expansion, like inferior paints. It is the greatest long service paint known, and is worth more to you because, with Dixon's, "Paint and be done with it" is a tried and true paint maxim.

Dixon's is an American (mined in New York State) product. The overlapping (linked by nature) flake silica-graphite particles of the pigment, with the elastic linseed oil, allow perfectly for expansion and contraction—result, a clinging, non-scaling protector, a tight, perfectly fitting coat against dampness. No paint will wear and cling like Dixon's.

Some of our records cover ten years and more of service on metal and wood surfaces. It is a decorative paint, too, when trimmed.

Do you keep up with Dixon's literature, such as our house organ, GRAPHITE, and special literature in your line? Write us about it.

Safe at Last

ACCORDING to the New York *Sun*, the railroads now are safe against attacks from within, as well as from without the law. In an editorial the New York *Sun* says:

"For the better part of a generation labor organizations could raid the carriers for a 10 per cent., a 20 per cent., a 30 per cent. increase of wages and cart off the booty. But the Interstate Commerce Commission, the Government behind it, and the nation behind both, would not listen to a 1 per cent. increase in traffic rates to compensate in part for those wage increases and to keep the roads out of bankruptcy. Now, just as before, hundreds of millions of increased wages go to the employees from time to time, but a 15 per cent. increase in traffic rates is not too much, nor is a 25 per cent. increase, nor in some instances a 40 per cent. increase, to cover those greatly increased wages and the other higher costs of doing railroad business.

"For the better part of a generation the law forbade railways, under heavy penalties, to make agreements which would permit them to practise economies of operation, to apportion freight and route it so that it could be hauled at the lowest cost and to the largest advantage of the carriers. Competition was a court decree. Pooling was a thing for which a man must go to jail. Now pooling is the basic principle of the Government's operation of the railroads. Now discrimination is a virtue as bright as rebating once was a crime black.

"Now the Government does not merely say traffic may be routed to make the best hauls for the roads, whatever treatment of the public results; it says it must be.

"Now the Government does not merely say competition is unnecessary, but says it cannot be.

"Now the Government does not merely say rail business, receipts and profits may be pooled; it says they must be.

"Now the Government does not say the public must be served cheaply; it says the public must pay.

"For the better part of a generation the Government, through Congress, made laws, and through the Interstate Commerce Commission executed them, so as to cripple, starve and scrap the railroads. Now a railroad man, under Government sanction and inspiration, may take a monkey wrench and smash up the Interstate Commerce Law, as for many years the Interstate Commerce Commission could smash and did smash up the railroads.

"For the better part of a generation the Interstate Commerce Commission was an omnipotent and ruthless destroyer of the railroads, good and bad. Now the Interstate Commerce Commission is only a gloomy shadow of a gloomier past.

"We can all remind ourselves that it will be as fatal after the war to go back to the old policy of stripping and starving the railroads as it proved to be before the war. Let us not forget."

"It Runs Away With You"

THIS caption is the exact expression of a stenographer who is an enthusiastic user of Dixon's ELDORADO—"the master drawing pencil."

What could we add that will more clearly indicate the importance of the ELDORADO for stenographic work?

The best advertising copy for the ELDORADO is actually written by its users.

Illustrative of Increased Values

THE *St. Louis Lumberman* gives an interesting illustration to show the increased buying power of the farmers to-day as compared with twenty years ago. A Missouri farmer, it says, went to a general store to buy a buggy. The price of the buggy he wanted was \$90. The farmer objected that his father twenty years ago had bought one just like it for \$60, and with better methods of turning them out he should not have to pay more. Fortunately, here was one of the few merchants who kept records and he hunted up his ledger of twenty years ago and found that the father had not paid cash but had turned in three hundred bushels of corn for a sixty-dollar buggy. The merchant then turned to the son and said, "Deliver me the three hundred bushels of corn and I will give you in turn a \$90 buggy, a \$75 wagon, a \$20 suit of clothes, a \$20 dress, a \$5 baby dress, a \$5 crib, \$10 worth of sugar, \$13 worth of tea, \$100 worth of gasoline and \$15 worth of lubricating oil, a total of \$353 as the present value of that many bushels of corn. As the farmer was not setting up a store of his own, he decided to pay cash for the buggy.

Carbon vs. Graphite Brushes

ONE of our customers reports that the commutator of their motor was turned down and put in service with carbon and graphite brushes in the holders. A week's running produced a groove under the carbon brushes 1/16" deep and the brushes were badly worn. The part of the commutator under the graphite brushes showed no wear. As a result Dixon's Brushes have been adopted for their entire electric equipment.

The Four Elements That Make Foreign Trade

THE Hon. Breckenridge Long, Assistant Secretary of State of the United States, said at a late luncheon of the American Manufacturers' Export Association that there are four elements which enter into foreign trade and which underlie and make possible foreign trade of any sort. "First, there must be goods to sell; second, there must be markets in which to dispose of them; third, there must be ships in which to carry them; and fourth, there

and put up into casks for shipment. Whether or not cold storage would have to form a part of the process, we are not informed, but care must be taken so that the albumen in the eggs does not coagulate on account of the heat.

Centers of Industry

THE *Literary Digest* calls our attention to the centering of various industries.

"Pill Alley" is college slang for a certain stately elm-arched street lined with colonial mansions. The name 'Pill Alley' is a recognition of the large number of doctors who live along that one avenue.

"More than three-fourths of the collars and cuffs made in the United States come from Troy, N. Y.; silver plate to a like degree is manufactured at Meriden, Conn.; tanning is centered at Milwaukee, Wis.; and Paterson, N. J., is the home of silk-manufacturing.

"So the story goes; a large number of the great and small industries of the United States are not scattered broadcast over

the entire country, but are confined to one narrow locality.

"Westfield, Mass., now manufactures over two-thirds of our whips.

"The position of Lynn in the shoe industry, the center of a circle of towns manufacturing a fourth of the shoes worn in the United States, is partly due to the chance settlement there of a Welshman named Dagys, the most skilful shoemaker in the colonies.

"Philadelphia manufactures more hosiery than any other place in the country."

UNEXPECTED must have been the reply of the husband whose wife said:

"You have never taken me to the cemetery."

"No, dear," he answered, "that is a pleasure I have yet in anticipation."

Ain't It Discouragin'?—Hopkins



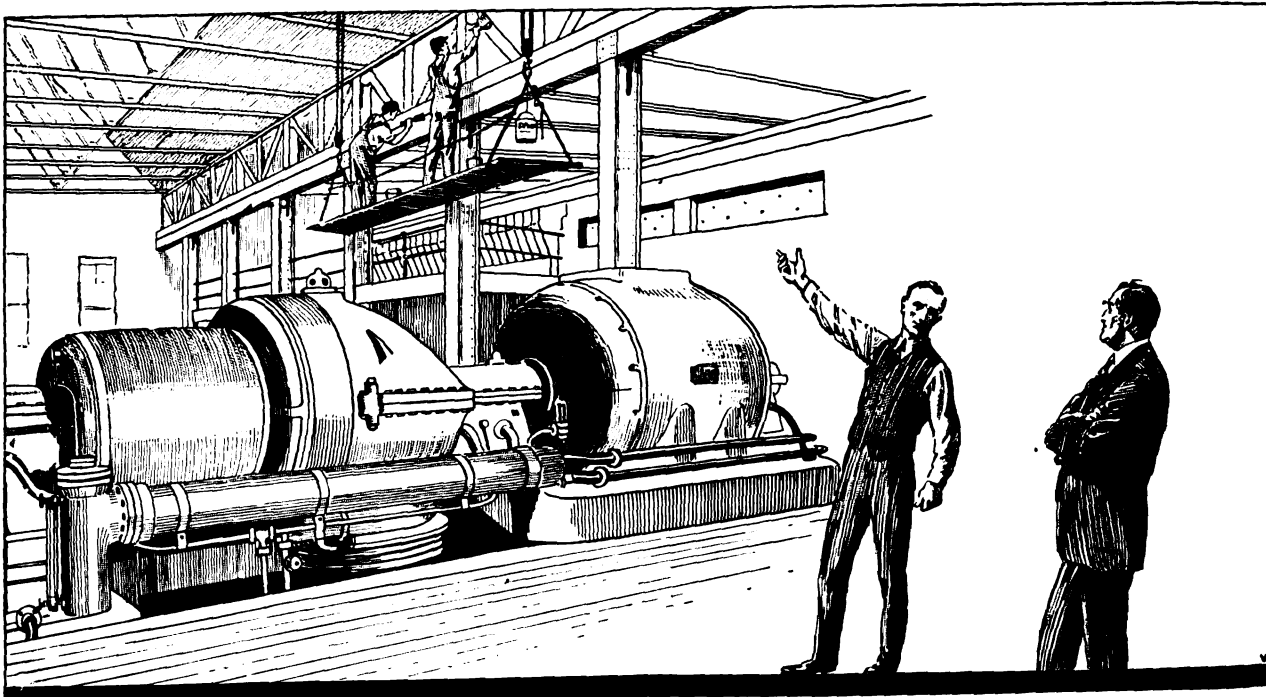
must be banks to carry out the transactions and to return to the manufacturer the money which his goods have brought."

Liquid Eggs

TO think of eggs in the liquid form, unless it is aged ones fired at some speaker that we do not like, is something that we are not in the habit of.

However, we learn through *Commerce Reports* that liquid eggs from the West Coast of Africa and from China are being shipped to London.

The mode of preservation and packing, so far as the information goes, simply seems to be that the eggs are broken in a vessel and a solution of boric acid is added as a preservative. The mixture is then thoroughly stirred



Protect It with DIXON'S Silica Graphite PAINT

If you knew its record you wouldn't ask why.

It has been on the market for over fifty years, and is being used under all sorts of conditions of climate, moisture, steam and fumes. Its success has been so conspicuous and universal it has won recognition as the **longest service** paint.

Power plants everywhere use Dixon's Silica-Graphite Paint for smokestacks and all interior and exterior metal work. This paint is made in **First Quality** only. So there is but one grade, and that the highest.

Write for copy of Bulletin 190-B before you specify any other brand of paint.

Made in JERSEY CITY, N. J., by the

Joseph Dixon Crucible Company



Established 1827



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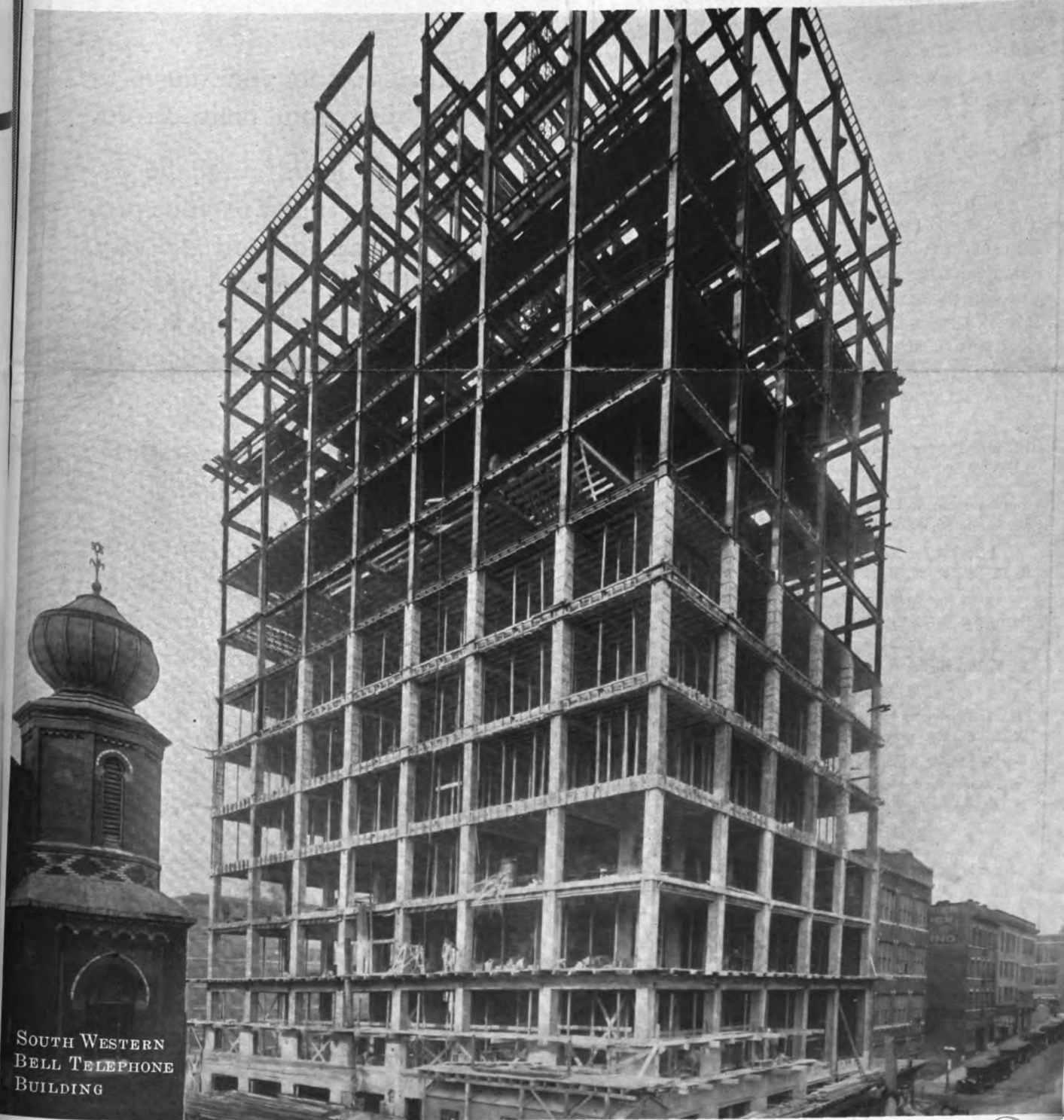
Graphite

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VOL. XXI

APRIL, 1919

No. 4



SOUTH WESTERN
BELL TELEPHONE
BUILDING

JOSEPH DIXON CRUCIBLE CO.

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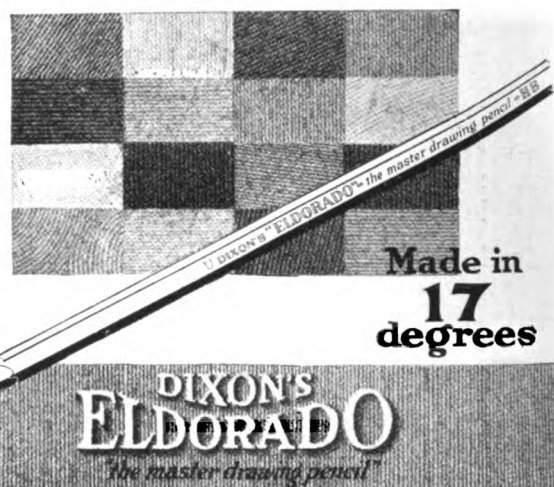
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*With Branch Houses in Mexico, Cuba, Peru, Argentine,
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A. R. MacDougall & Co., Ltd., 468 King St., West, Toronto, Ontario, Can.

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS
Canadian Asbestos Company, Montreal, Quebec, Can.



Makes it easy for your fingers to do the things your brain directs.

Once you have found the degree precisely suited to your pencil needs—and have felt the easy, rapid glide of the lead over the paper—you will never be satisfied with other than this superior, long wearing pencil.

6B (softest) to 9H (hardest), HB (medium) for general use.

Get a trial dozen from your dealer, or send 10c for a full length pencil, mentioning dealer's name and whether very soft, soft, medium, hard or very hard lead is desired.

Joseph Dixon Crucible Co.

Established 1827



Dept. 190-J

Jersey City, N. J.



Canadian distributors

A. R. MacDougall & Co., Ltd.

Toronto, Ont.

There is a Dixon-quality pencil, crayon, and eraser for every purpose.



ACCORDING to the "*Brass World*," "The Present Status of the Electric Brass Furnace" was the subject

of a paper presented by H. M. St. John, Research Engineer, Commonwealth Edison Co., before the Ohio Electric Light Association.

The paper brought out the fact that the war time conditions have resulted in a considerable increase in the use of the electric furnace for melting brass, and there is some uncertainty as to whether all the furnaces now running will continue in operation when conditions again become normal.

As far as yellow brass is concerned, an entirely satisfactory furnace has not been produced, but the field has been partially covered and progress is being made.

The electric furnace cannot be profitably employed in the brass melting industry unless there is some substantial saving to offset the increased cost of power.

When normal times come no electric furnace can hope to succeed unless its use results in a saving of metal as compared with a fuel-fired furnace.

The application of the DIRECT arc furnace to copper alloy melting has been rather limited, no new types being developed for this work.

No form of the general type has ever been satisfactory in melting yellow brass or other copper alloys containing an appreciable percentage of zinc. The INDIRECT arc furnace is somewhat more complicated, and its thermal efficiency is not so high as the DIRECT arc furnace, but in the melting of copper alloys it

Electric Furnaces vs. Crucibles

can be used in larger units and seems more satisfactory.

Reference was made to a new type of IN-

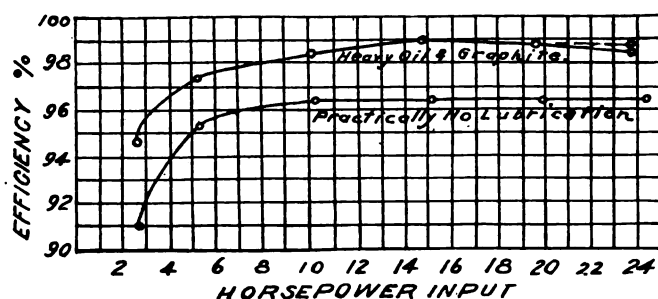
DIRECT arc furnace (he undoubtedly refers to the Detroit Rocking Electric Furnace), in which the metal, as soon as it becomes molten, is agitated by the rocking of the furnace mechanically in order to avoid the overheating of the surface layer.

We understand that, as a matter of fact, the electric furnace thus far has made very little headway in the melting of brass and bronze, although this furnace developed by the United States Bureau of Mines was supposed to be the last word in such development.

Daily new electric furnaces continue to be placed on the market, and this method of melting, of course, is going to be an increasing factor in all of the metallurgic industries. However, many problems are still to be solved in electric furnace operations, and while some types of furnaces now on the market are doing excellent work, nevertheless there are still some that by no means have attained the stage of perfection.

It is the opinion of a metallurgist that for some time they will only go into the larger shops, as the cost of an installation is from seven and eight thousand dollars and up. Therefore, it can be seen that only the larger foundries can touch them.

MANY a man has remained poor because he insisted upon passing on to someone else responsibility for his mistakes, which, had he kept it, might have worked to his own profit.
—*McClary's Wireless*.



Efficiency of Gear Drives

IN a paper read before the American Society of Mechanical Engineers at their Spring Meeting, 1918, in Worcester, Mass., C. M. Allen, Professor of Hydraulic Engineering at Worcester Polytechnic Institute, told of a very accurate and reliable method for determining small power losses developed there by Professor Allen and Professor F. W. Roys of the Department of Mechanical Engineering. Previously, the method for determining efficiency of gears had been to measure, mechanically or electrically, the power input and output from which the efficiency was obtained by dividing the Horse Power Output by the Horse Power Input.

But since the wonderful development in the mechanical features of gear drives as a result of the rapid advance in the manufacture of automobiles, the power loss in transmission has been reduced to a very small value, and the power loss is very small. In order to measure the small differences encountered here, a more accurate method than commonly used is essential, so that trustworthy results could be obtained.

The apparatus used consists of an electric motor so suspended in a cradle that both the armature and field are free to turn. The armature shaft is connected directly to the gear shaft and the driven shaft directly to an Alden absorption dynamometer. The reaction of the motor field is balanced by the action of the dynamometer through a simple lever, the arms of which are accurately proportioned to the ratio of the gears. In the system of levers, the balance is maintained by means of an auxiliary beam and rider weight, which can be very accurately adjusted. The method does not eliminate the power input and output, but by the use of balancing reactions of motor field and dynamometer the Horse Power Input is equal to the Horse Power Output plus the loss, which is the quantity directly measured.

The entire system can be so adjusted that any power input desired can be obtained. When we consider the wide variations in power used, varying from almost 25 H. P. down to 2 H. P., the maximum average deviation of 1 part in 1000 is remarkable.

Several series of runs were made using this method. In series 1 there was practically no lubricant present, the oil and graphite formerly used having been cleaned out with gasoline. The friction loss in this case was sufficient to cause the gears to heat considerably. Some heavy oil and flake graphite were mixed and used in the gear case, the results showing an increase in efficiency amounting to from 2 to 3%. Series 3 was a duplicate of 2 after more thorough blending of the oil and graphite had taken place.

EFFICIENCIES

H. P. I.	Series 1	Series 2	Series 3
24.4	96.4
23.7	...	98.4	98.7
20	96.4	98.6	98.8
15	96.3	99.0	99.0
10	96.4	98.45	98.4
5	95.4	97.4	97.4
2	91.9	94.6	94.6

These results are the mean of from 2 to 6 runs at each load, which showed a very small deviation.

The value of thorough lubrication is evident, and although it might have been desirable to have had some runs without the use of the graphite, we feel certain that such results would have shown what the Dixon Company has always claimed—that flake graphite properly combined with oils and greases is unexcelled, functioning because of its ability to build up the microscopic irregularities, presenting a tough surface of graphite, and preventing metal to metal contact.

The curves show graphically the efficiencies for all three tests. Professor Allen says of these: "The test with the more perfect blending of the lubricant showed results identical with the previous one except as indicated by the dash line at the end of the upper curve. This showed that the lubricant was not squeezed out from between the teeth at quite so low a pressure."

Professors Allen and Roys are to be congratulated upon the development of such an ideal method, and we feel sure that a new era of experimental power engineering has been opened up.

Spring Painting

*"When Spring Unlocks the Flowers to Paint
the Laughing Soil."*—BISHOP HEBER.

THE famous Bishop was a good churchman and a good poet. No doubt he was a good painter, if he set his hand at it. When he painted his rectory, it was painted in spring, no doubt, so as to attune together house and nature.

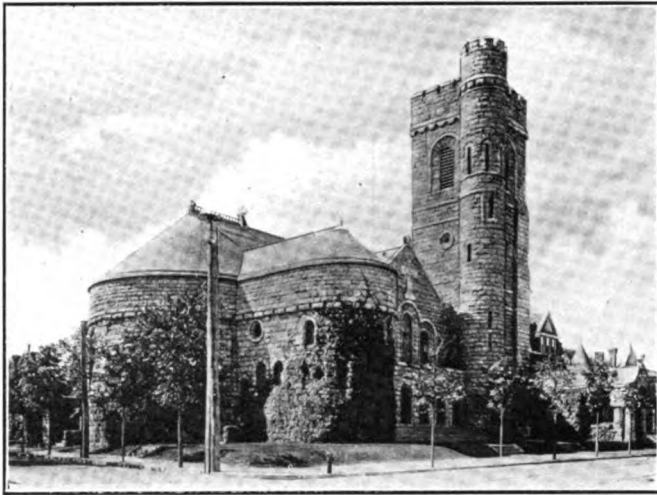
Dixon's Silica-Graphite Paint makes an excellent decorative paint. It comes in four colors, Natural Color (Dark Gray), Olive Green, Dark Red, and Black. The trimming can be done in a lighter color. Only the trimming will need retouching frequently, as we have record of Dixon's Paint serving many years on wood work.

Dixon's Paint is the great protective paint for metal work, used against weather, wear, acids, gases, alkalis, smoke, and other deteriorating agencies.

Labor is now so expensive that it is wise to "paint once with Dixon's Paint and be done with it" for years. The few cents more per gallon that Dixon's costs is as nothing because it LASTS LONGER. You waste labor when you use an inferior, cheaper "per gallon" paint.

Look over your buildings, bridges, metal doors, shutters, fire-escapes, tanks, smokestacks, and other structures, and PREPARE FOR RECONSTRUCTION with Dixon's Paint.

To put off painting in spring is something nature would never do, to quote the good Bishop Heber. Why should man? Moreover, many a hero needs a "job." He has just painted "finis" on our foreign enemy. Start new work. Touch up old work. Keep the boys busy and keep things looking bright this Victorious Spring.



St. Paul's P. E. Church, Paterson, N. J.

WE reproduce the following testimonial from a well-known decorator and painter of the famous silk city. The church referred to is a prominent Episcopal church, situated on Broadway.

"11 PARK AVENUE,
PATERSON, N. J.

JOSEPH DIXON CRUCIBLE CO.,
Jersey City, N. J.

Ten years ago I was called upon to paint the iron work about the exterior of St. Paul's P. E. Church, this city. These buildings form a most artistic group designed by the late Halsey Wood, the noted ecclesiastical architect. There are copper gutters, ridge-roll and leaders, etc. The numerous porticos and arches are filled with wrought iron work. After two years' service the metal showed rust. I was then asked to repaint with a paint of my own choosing. Naturally I chose Dixon's Silica-Graphite Paint. My reason for so doing was that I watched a job which had been done some years previous on the iron fence of the Danforth Free Library, this city, where Dixon's Paint was used.

The wisdom of my selecting Dixon's Silica-Graphite Paint has been amply borne out, as it is now eight years since this painting was done, and all the metal is in fine shape, with no signs of rust or deterioration.

(Signed) CHAS. GREENLAGH."

Not at Liberty

A GROUP of aliens desirous of taking out their first naturalization papers appeared not long ago before the court at White Plains, New York.

One of the applicants was a bright-looking young Italian. The justice, questioning him, found that the little fellow had a fairly clear knowledge of what his duties as a citizen would be, and of the general plan of the Government of the United States.

"Who's the President?" inquired His Honor.

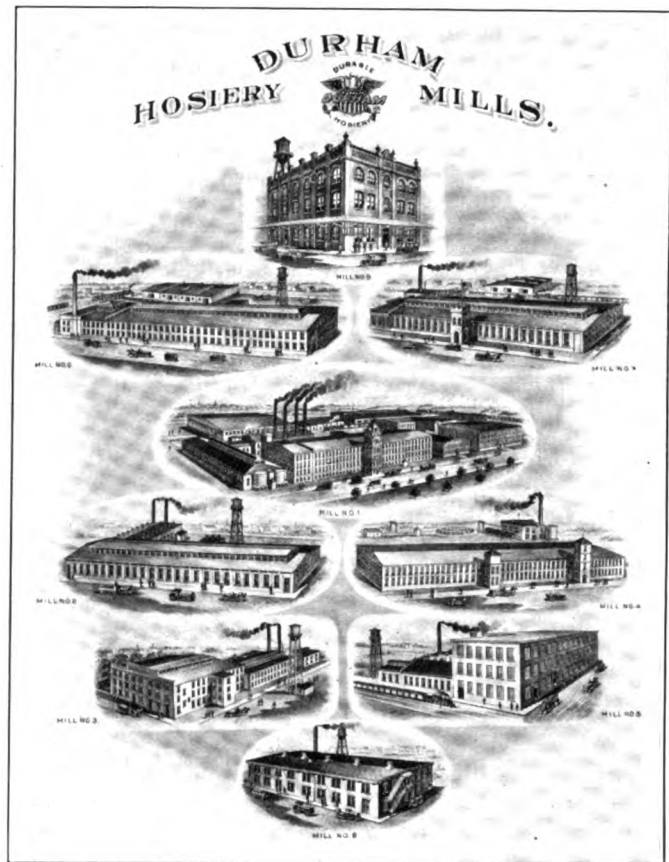
"Mista Willse."

"Who's the Vice-President?"

"Mista Marsh."

"Well, now, Tony, could you, as a foreign-born person, become President of the United States?"

"Judga," said Tony with a regretful smile, "you haf excoosa me, please—I gotta good job already at a sawmill!"
—*Saturday Evening Post*.



Durham Hosiery Mills, High Point, N. C.

WHEN a concern as widely known and as ably managed as the Durham Hosiery Mills of High Point, N. C., selects and makes use of Dixon's Silica-Graphite Paint, there can be no better recommendation for the paint, especially when it is selected for its durability and economy, as it was in this case.

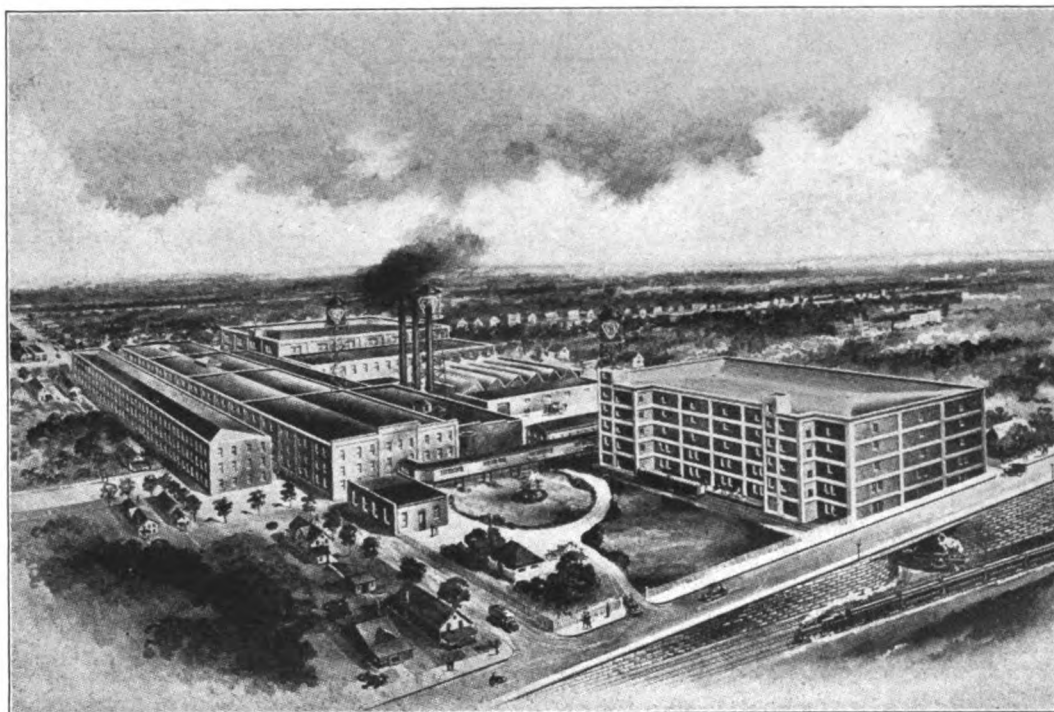
The tank shown in cut, Mill No. 3, was painted with Dixon's Silica-Graphite Paint over 5 years ago, and no repainting has been found necessary. It was partly on this record that Dixon's Silica-Graphite Paint is now being used on piping, roofs, etc., indoors and outdoors, where a protective paint is required.

GRAPHITE is proud to be able to illustrate such an inspiring exhibit of American textile industry as these eight mills of which Mr. C. D. Parten is General Superintendent and Mr. B. C. Freeland, Superintendent.

Anyone interested in a protective paint such as we manufacture should write our Paint Department 190-B for further information.

Oxygen Tanks to Prevent Accidents

MILITARY planes flying above an altitude of 10,000 ft. are equipped with an apparatus for supplying oxygen to the fliers. It was proved by the English air casualties that 90 per cent. of the accidents were due to the fliers suffering from lack of oxygen. The device was designed by Lieutenant-Colonel Dryer of the British R. A. M. C., and works under variable tank pressure from 100 to 2250 lbs. per square inch with a temperature range of from 70 deg. to 80 deg. F. to 20 deg. or 30 deg. below zero.—*Compressed Air Magazine*.



Plant, G & J Tire Co. (U. S. Rubber Co.), Indianapolis, Ind.

THE smokestacks, water tanks, boiler fronts, and all metal work of this great tire company are protected with Dixon's Silica-Graphite Paint.

The U. S. Rubber Company sells its tires on a "service" and not on first cost basis. Tiffany sells his jewelry on the same quality basis. Gorham sells his silver and Huyler his candy on their sterling value. It was the man under the uniform who won the war.

Outside appearance, lower price per gallon or per pound or per unit, is a poor way to figure and a sure way to get inferior service, because you waste labor and capital in frequent renewals.

Why did the U. S. A. discard wooden shipbuilding? Because steel ships will last many times as long, even though their first cost is a little more.

Remember, Dixon's Silica-Graphite Paint is worth more per gallon because it lasts longer. If you expect to repaint your buildings this spring, write us for long service records and descriptive literature.

Some Early Memories

HENRY CABOT LODGE, in his book entitled "Some Early Memories," has the following which will certainly interest readers of GRAPHITE who have made their fortunes, even if it does not teach them the value of the simple life:

"The rapidity of fortune making is but one form of the increased and increasing swiftness which marks to-day every kind of occupation, whether useful or otherwise, as well as every function of daily life. To all societies it has brought haste in living, and hurry and restlessness are the keynotes of existence. The leisure class rush uneasily from one amusement to another; the busy transact business and push

"A JOB FOR EVERY STAR"

THE Boys are coming back, and in accordance with the promise made to them by President Geo. T. Smith when they entered the United States Service, each one is being assigned to a position at least as good as that which he left.

Last month we published a list of those who had returned up to the time we went to press. The following have returned since that time. Others will be added from time to time as they return.

R. B. VINCENT, *Gas Defense Division, U. S. A.* Philadelphia District Office.

FRANK CYWINISKI, *5th Battalion, Aberdeen Proving Grounds.* Crucible Factory.

TONY GREY, *153rd Depot Brigade, U. S. A.* Crucible Factory.

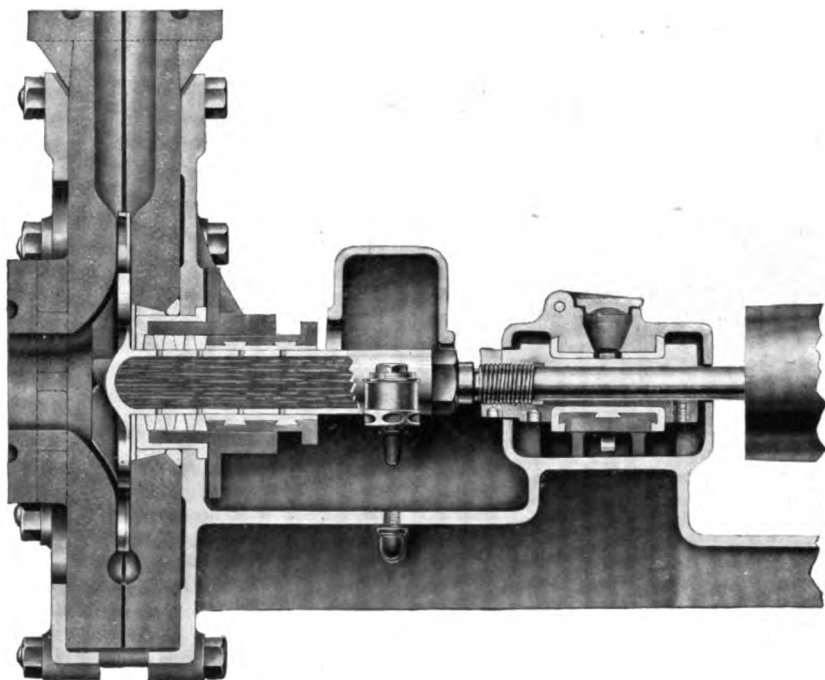
MICHAEL FALLON, *347th Regiment, 78th Division, U. S. A.* Crucible Factory.

ANTONIO LESMAN, *1st Gas Regiment, U. S. A.* Crucible Factory.

forward their affairs with feverish and often breakneck speed. That repose which our ancestors so prized and which they thought comported best with dignity of life and manners has departed. Quiet and repose would now be considered stupid and dreary, while contentment is looked upon as a sign of a poor, unambitious soul. The restlessness and hurry so prevalent and so beloved to-day have produced certain far-reaching results, which affect profoundly every activity of life and thought and thereby the very nature of our civilization."

◆ ◆ ◆

Look on the bright side, and if there is not a bright side use Dixon's Graphite and make one.



The Elmore-Knight Acid-Proof Centrifugal Pump

THE "Elmore-Knight" Acid-proof Centrifugal Pump seems to fill a long-felt want in the Chemical Industry. Its chemical stoneware volutes are made in the well-known works of Maurice A. Knight at East Akron, Ohio, and are, of course, proof against all ordinary acids and alkalis. The impeller and hub are made of "Bario" metal, which experiments have shown to be the most acid-proof commercial metal of which there is any knowledge. The impeller hub is hollow and is packed with *Dixon's Waterproof Graphite Grease*, supplied through a large grease cup which revolves with the hub. The pressure on this cup forces the grease through holes in the impeller hub, thereby supplying continuous lubrication to the stuffing box.

The successful operation of the pump depends upon sufficient and proper lubrication, and experience has shown that *Dixon's Waterproof Graphite Grease* provides the lubrication, and at the same time acts as a further protection to the metal from the action of acid and alkali solutions.

The following instructions are issued to each purchaser of a pump. "The impeller hub and grease cup of each pump shipped from our factory are packed with *Dixon's Waterproof Graphite Grease*, which experience has shown us to be the most satisfactory lubricant for use in the hollow impeller hub. You should use this grease *and no other*, as it will not harden and clog up the holes in the impeller hub, through which the stuffing box is lubricated, neither will it rub off the surface. In applying this grease to new surfaces, be sure that these surfaces are absolutely dry.

"This grease is manufactured by the Joseph Dixon Crucible Company, of Jersey City, from whom it can be purchased in any desired quantity. They will be glad to give you the name of the nearest jobber who carries it in stock."

The pumps are sold by G. H. Elmore, Colonial Trust Company Building, Philadelphia, Pa.

Ten Golden Maxims

(Author is unknown or we'd surely give him credit)

1. Honor the CHIEF. There must be a head to everything.
2. Have confidence in yourself, and make yourself fit.
3. Harmonize your work. Let sunshine radiate and penetrate.
4. Handle the hardest job first each day. Easy ones are pleasures.
5. Do not be afraid of criticism—criticize yourself often.
6. Be glad and rejoice in the other fellow's success—study his methods.
7. Do not be misled by dislikes. Acid ruins the finest fabric.
8. Be enthusiastic—it is contagious.
9. Do not have the notion that success means simply money-making.
10. Be fair and do at least one decent act every day in the year.—From John Hart's "Hello."

Southwestern Bell Telephone Co. Building, 11th and Oak Streets, Kansas City, Mo.

THIS building is shown on the cover of this issue and the fabricators were Christopher & Simpson Iron Works Company, of St. Louis and Kansas City, Architects; Henry F. Hoit, of Kansas City, and I. R. Timlin, of St. Louis, Associate Architects.

Dixon's Silica-Graphite Paint protects the structural steel work contained in this building.

There is hardly a city where the structural steel of some of its buildings is not protected with Dixon's Silica-Graphite Paint.

We should be glad to send our Notable Building Booklet to any architect, engineer, fabricator, or investor.

Dixon's Silica-Graphite Paint is the most economical to use because it spreads easily and saves in brushes, time, etc. Labor costs "run up" these days of high prices.

Dixon's Paint for over 50 years has been made in FIRST QUALITY only, so that the specifier is sure of no substitution of lower grades when Dixon's is specified.



New Dixon Graphite Products Booklet

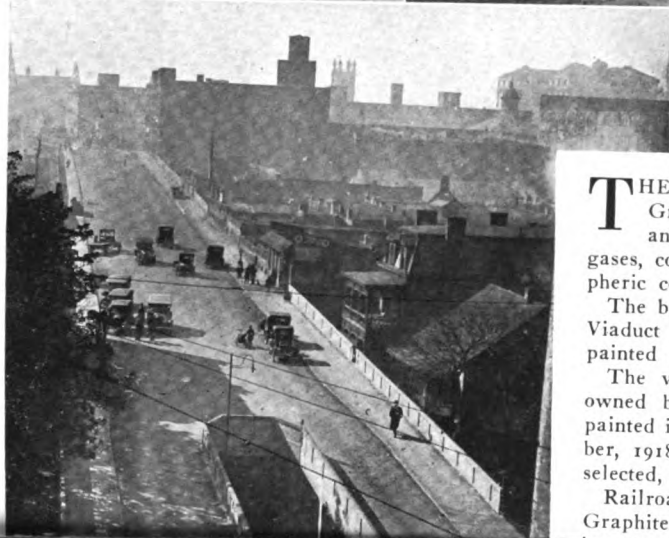
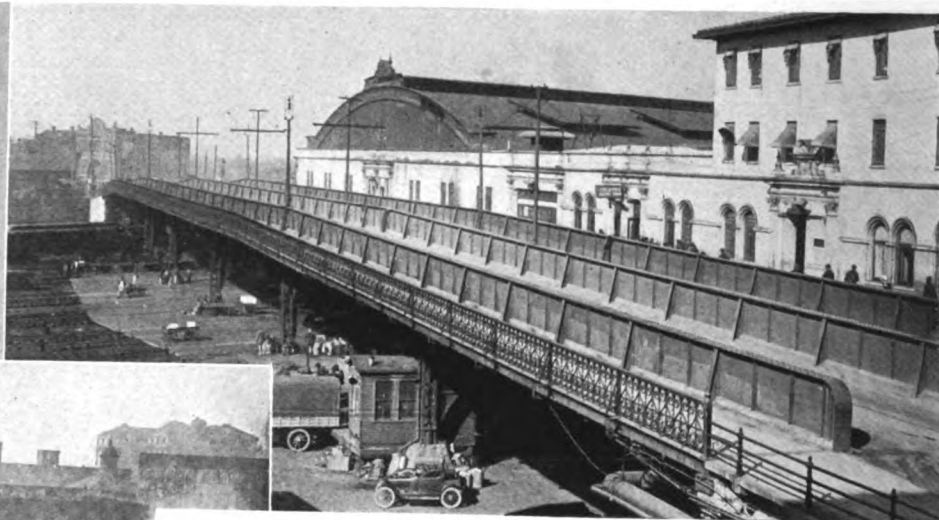
"DIXON'S Graphite Products" is the title of a new pocket catalog issued by the Joseph Dixon Crucible Company of Jersey City. While not so complete as the large general catalog, it furnishes a good idea of the variety of products.

Pages have been devoted to lists of articles especially for mills, railroads, automobiles, etc. The descriptions are brief, but the Company will gladly send pamphlets dealing in detail with any of the individual members of the line.

This new catalog should be in the file of those who have occasion to use lubricants, paint or pencils. Ask for Booklet No. 190-KP.



Mitchell Street Viaduct,
Atlanta, Ga.



THESE structures are painted with Dixon's Silica-Graphite Paint. The viaducts go over railway tracks and are subject to the attacks of sulphurous and other gases, combined with dampness, cinders and other atmospheric conditions.

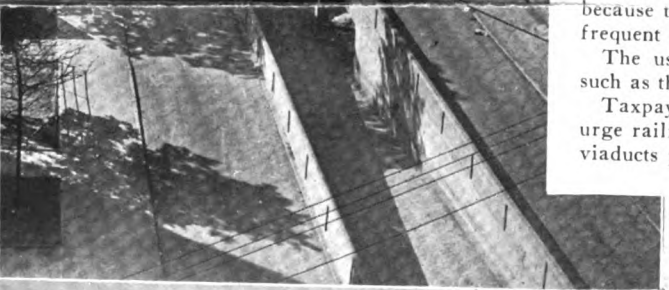
The building shown on the right of the Mitchell Street Viaduct is the Atlanta Terminal Station, which is also painted with Dixon's Silica-Graphite Paint.

The viaducts were painted in 1918, while the bridge owned by the Piedmont & Northern Railway Co. was painted in 1912, and repainting did not occur until December, 1918, when Dixon's Silica-Graphite Paint was again selected, a service of six years.

Railroad and municipal engineers use Dixon's Silica-Graphite Paint because of its reliable and long service and because they cannot afford to run up their labor account by frequent repainting.

The use of Dixon's Silica-Graphite Paint on structures such as those illustrated here speaks for itself.

Taxpayers and stockholders are interested and should urge railroads and municipalities to keep *their* bridges and viaducts painted, and to use the *longest service* paint.



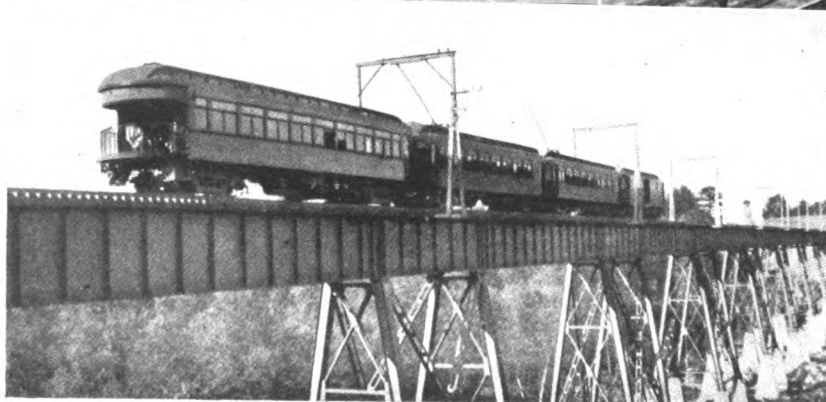
Washington Street Viaduct,
Atlanta, Ga.



Bridge, Piedmont & Northern Railway,
Chick Springs, S. C.



Bell Street Viaduct,
Atlanta, Ga.





"IN FLANDERS' FIELDS"

Gold stars now mark on the Dixon Honor Roll the names of two Dixon boys, John Joseph Crosby and Tony Moroieko.



JOHN JOSEPH CROSBY

was born in Jersey City, November 15, 1895, and entered our employ November 18, 1911. On April 4, 1918, he was drafted from the Pencil

Factory to enter the 309th Infantry, Co. K. He was killed in action in the Argonne Forest battle, October 18, 1918.

TONY MOROIEKO

was born November 12, 1895, and entered our employ May 7, 1917. July 25, 1917, he left the Pencil Factory to enlist in the 4th Regiment, N. J. N. G. He has been reported as having died of wounds received in battle. We are unable to find out any more regarding the battle, date or any other information regarding him.

Long Life

WHEN a man arrives at the age of ninety-six, he should give up some of the frivolities of youth and practise some conservation of his energies. At least, that is what Doctor Stephen Smith of New York City tells us. He has lately celebrated his ninety-sixth birthday and has decided to permit himself an extra half hour in bed, especially when he intends to have a dinner at night where he is expected to make a speech.

Dr. Smith was a stripling of seventy when in 1893 he assumed the duties of chairman of the State Board of Charities, and he remained an active member of it until last year. He still remains in medical practice, chiefly as a consultant and for the benefit of brethren of his profession, it being his creed that when a man falls out of step with his work and fellow men, he is on the decline and unlikely to make old bones.

Dr. Smith says, "A man makes a grievous mistake when he gives the milestones of life serious consideration as he passes them one after the other." He does not permit himself to feel the weight of years. He does not know, he says, whether he is ninety-six, or seventy-one, or thirty-eight. Others may keep the tally of his birthdays if they find any interest or entertainment in it, but for himself, he chooses not to give the numerical significance of the day a single thought.

Dr. Smith's ninety-fourth birthday was passed at Battle Creek, Mich., where he went to look into the theory that a vegetarian diet spells longevity for man. He tried the theory out and gained a great deal of benefit, but wholly, he believes, through his adventure with a new theory rather than what he ate or omitted to eat. He said that there were scores of people around him who were getting well principally because they had been fagged with life before and had found a new interest in life—that of getting well.

"None of them was getting a drop of medicine, although a number had been drugging themselves for years. If they find you smoking at the Battle Creek sanitarium they render you your bill and send you away. Doing without their tobacco was doing a lot of these men great benefit."

Dr. Smith does not smoke, but he has prescribed it, for fifty years, as often as not to non-smokers. He claims that any change will do any man good, for it takes him out of himself. "Introspection is not only the death of ambition and usefulness: it has been the death of many men and women as well."

Dr. Smith says, "Live, keep alert, keep occupied, keep in touch, read the news and seek contact with men and women who are active and your health in ninety cases out of a hundred will take care of itself."

Dr. Smith has been a noted man in medical circles for many years.

An Americanization Bill

THERE is before the present Congress a bill known as the Smith-Bankhead Bill (Senate Bill 5464, House Bill 15402), which ought to be passed. It is a bill which every big manufacturer should support and assist in every way that he can to have passed.

There are many facts in connection with the welfare of the United States that most of us never dreamed were true. Among them are:

8,500,000 persons in the United States unable to read, to write, or to speak English.

In other words, there are eight and one-half million people in the United States who cannot read the newspapers or the laws of their country—a greater number than the combined populations of Greater New York, Philadelphia, and Chicago.

Then there are:

5,500,000 persons in this country who cannot read or write English—or any other language!

In other words:

Fifteen per cent. of the discriminating purchasing power of the country.

There are two angles to this question, one of patriotism, and the other, one of self-interest. That of self-interest is quite as praiseworthy as that of patriotism, since neither one can be affected without the other coming about as a matter of course.

These people are buying goods but are not in a position to discriminate in favor of nationally advertised merchandise.

The addition of more than eight million persons to the potential buying power of the national advertisers' market means lowered cost of product.

Whether this bill passes will depend entirely upon whether or not the House Committee on Education, and the Senate Committee on Education and Labor, are convinced that the sentiment of educated people throughout the United States is back of the measure.

Reviews South American Trade

COMMENTING on North American activities in South American markets, the newspaper *La Prensa*, after alluding to tariff conditions which have prevailed, says:

"North America has been exporting less than a tenth of her products, because they were needed internally and because her tariff policy prevented exports, which in turn would have made American goods known in other lands. Thus, though having grown astonishingly prosperous at home, her commercial ties have been so relaxed that only an unforeseen event, like a terrific war, could make her appreciate the value of the South American markets.

"During the war, and entirely because of it, the United States attained a commercial position here which can be maintained only by a considerable change of her methods, as the dawn of peace permits Europe to renew the competition."

The newspaper concludes by expressing the hope that some arrangement can be made through which will be built up a lasting system of reciprocal trade between the United States and Argentina.—*N. Y. Sun*.

Uncle Sam's Resources

FROM United States Reports we learn that we represent but 6% of the world's population and own but 7% of the world's land. But we produce 70% of the world's copper, 66% of the oil, 75% of the corn, 60% of the cotton, 33% of the silver, 52% of the coal, 40% of the iron and steel, 20% of the gold, 85% of the automobiles, 25% of the wheat and we operate 40% of the world's railroads.

Price Cutting

PRICE cutting is a form of dissipation in modern business. When a man begins cutting prices, he takes his first nip of an intoxicant more seductive and more deadly in its effects than any alcoholic beverage. He creates straightway not only the appetite but often the necessity, through pressure of other price-cutting tipplers following his example, to have another, then "still another" and finally just "one

horse-drawn vehicles from crossing from Manhattan to Brooklyn between 7 A.M. and 10 A.M. Between 4.30 P.M. and 6.30 P.M. the horse-drawn vehicles are barred from crossing the bridge from Brooklyn to Manhattan.

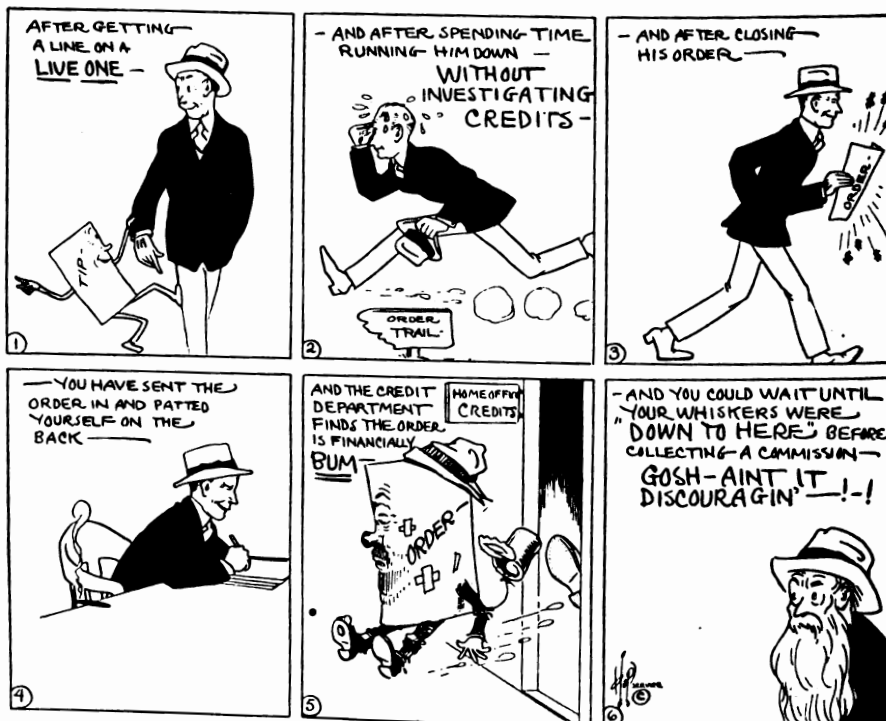
Value of a Chemist

AS a bit of evidence of the value of a chemist to a manufacturing concern, we may relate that a good many years ago a certain rubber company made a rubber packing that gave such good results they were not able to fill orders. The value of the packing was such that it promised much wealth to them. The process of making it was, practically speaking, accidentally discovered and the manner of its manufacture was rather crude and was left entirely to their superintendent, who simply knew that he took certain ingredients and subjected them to certain processes, with the result that he produced a packing of wonderful merit.

Later on complaints came in that the packing crumbled even while remaining in stock at the dealers'. The rubber company made an investigation and found that the packing did really crumble very much after the fashion of stale bread. They were never able after that to produce the same satisfactory packing and the only conclusion they could come to was that the rubber which they had been using lacked some ingredient that was possessed by the old-time rubber; but never having analyzed or known just what they were using in the way of raw materials, they were never again able to find raw rubber that would fill the place of the old-time rubber, and beyond the matter of rubber they did not know where to look to find the missing link.

THE easy-chair is what makes life so hard for a lot of us.—*McClary's Wireless*.

Ain't It Discouragin'?—Hopkins



more," until he is a confirmed underselling, unfair-competing, business-wrecking, cost-ignoring inebriate; and to continue the similitude to its conclusion, like that other drunkard who has dallied not wisely or well with alcohol, we find them both sooner or later side by side in the gutter. If you would follow in the way of a sober, sensible business man, shun the tipples that is alluringly labeled, "Cut Rates."—*National Association of Brass Manufacturers*.

Then and Now

THERE are men who may recall saying that the automobile was a rich man's toy and would have a short life. It may interest them to know that a new rule has been instituted for the Manhattan Bridge which prevents all

Paint Upkeep

A FACTORY kept "spick and span" in good appearance by a protective paint, such as Dixon's Silica-Graphite Paint, is a good advertisement for the products and financial stability of that factory. The factory looks prosperous and reliable, and therefore the deduction made by the passer-by is that the products of that factory are reliable.

The economy in using Dixon's Silica-Graphite Paint is that it LASTS LONGER and does not waste labor and material through necessity for frequent repainting.

Dixon's Paint is used both for metal and wood, and when decoration or trimming is desired a lighter paint can be used. This would have to be touched up more frequently, but Dixon's Silica-Graphite Paint on the body of the structure will last for many years.

Durability and Economy of Dixon's Silica-Graphite Paint

DIXON'S Silica-Graphite Paint may cost a few cents more per gallon, but these few cents give "more years" of service. Read this testimonial:

CHESHIRE, CONN.

JOSEPH DIXON CRUCIBLE Co.,

Jersey City, N. J.

Replying to your letter, we have not had occasion to buy more Dixon's Silica-Graphite Paint since 1916; and if your paint that we used then lasts longer, as we think it will, it will be a long time before we need any more. Your paint is the finest we have ever used for the protection of metal.

NORTHEAST FORESTRY Co.,

(Signed) F. S. Balkar, Manager.

When You Buy Dixon's Silica-Graphite Paint, You Buy Service

FOR over fifty years, in all climates, records for economy and durability have been made that have brought satisfaction to users and dismay to makers of cheap paints who try to convince a disgusted public that "lower" price per gallon can push "longer years of service" off the throne of choice and off the Feet of Reason! Do not be deceived; that "lower price" talk is a mocker and a cheap John.

GOLDEN BOUQUETS

OR WHY

DIXON'S
ELDORADO

"the master drawing pencil"

SHOULD BE USED

An Accountant writes:

"DIXON'S ELDORADO HB pencil answers my requirements perfectly, and the sample recently received from you is appreciated. I am accustomed to purchase my supplies at — or —, both of this city."

In the Accounting Field:

"WE acknowledge with thanks receipt of several samples of your ELDO-RADO pencils, which we found satisfactory in every respect. We purchase most of our supplies through —."

From a C.P.A.:

"WE shall, in our next order of pencils, try your ELDORADO. The pencil received as a sample was used by one of our partners, who liked it well enough to ask that in our next order we buy enough to give a sufficient test by our accounting staff."

A Photographer says:

"OF all the various uses to which a lead pencil may be put I believe the requirements of the photographic negative retoucher to be the most exacting of any. I am at present using the ELDORADO pencil in my studio with great satisfaction, selecting my pencils from the complete stock carried by — of this city."

Sample—then a Regular Supply

"WE have your favor of the 5th inst. enclosing samples of ELDORADO Drawing Pencils. We are very pleased to advise that these pencils have been found very satisfactory and that we have procured a supply from our dealers, —."

From a Shipbuilding Co.:

"REFERRING to your letter of the 7th inst. relative to ELDORADO Drawing Pencils, we beg to advise that we have recently purchased from the — Company a quantity of these pencils and have found them very satisfactory."

An Engraver says:

"AFTER a fair test of your 'master drawing pencil,' both in uniformity and lasting quality, I have no hesitancy in declaring the ELDORADO pencil the equal if not the superior of any domestic or imported one."

A Stenographer writes:

"THIS is to acknowledge receipt of your letter of the 25th inst. and two of your ELDORADO pencils, Grades 2B and B, for the use of a stenographer. I find the pencils sent me to be much more lasting than the ones I have previously been using and my employer has agreed to order 'Dixon's' for me in the future."

An Accountant writes:

"WE wish to advise that we have given your ELDORADO pencils, samples of which were sent us some time ago, a good trial, and find them satisfactory in every way. Your 4H is especially adapted to the work in our Accounting Department, and we will favor your brand when placing our next order."

An Industrial User writes:

"WE thank you for the generous sample of Dixon's ELDORADO pencils which you sent us. Our draftsmen have been using Dixon's ELDO-RADO pencils for some time and report that they are equally as good if not better than the best foreign pencils we have ever used heretofore."

A Director of Manual Training writes:

"AFTER trying the ELDORADO along with several other makes of pencils, I have specified your ELDO-RADO (4H) for my mechanical drawing classes throughout the high school."

From a Coal Mining Co.:

"THE ELDORADO samples sent me were entirely satisfactory and I made up my mind to use the Dixon pencil hereafter in my work. Name of stationer is —."

Dixon's Graphite Cup Grease

The presence of the selected flake graphite in Dixon's Graphite Cup Grease gives it much greater efficiency and makes it last much longer than ordinary greases. This means a twofold economy: Better lubrication and less grease.

Wherever it is possible to use cup grease about the plant—on pumps, engines, shafting and other machinery—Dixon's will give you better results at a lower cost. This can be demonstrated. Are you open to conviction? Ask for Circular No. 190-R.

Made in JERSEY CITY, N. J., by the

Joseph Dixon Crucible Company



Established 1827



Graphite Cup Grease



THE DIXON
NEW YORK

620

Graphite

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JOSEPH DIXON CRUCIBLE COMPANY, - JERSEY CITY, N. J.

VOL. XXI



MAY, 1919

No. 5



JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED 1827 Jersey City, N. J., U. S. A. INCORPORATED 1868

 **Miners, Importers and
Manufacturers of Graphite,
Plumbago, Black Lead** 

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WILLIAM G. BUMSTED	EDWARD L. YOUNG
J. H. SCHERMERHORN	HARRY DAILEY
ROBT. E. JENNINGS	

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ST. LOUIS OFFICE	501 Victoria Building
BUFFALO OFFICE	409 Erie County Savings Bank Bldg.
ATLANTA OFFICE	225 Peachtree Street

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Graphite Products, Ltd., 218-220 Queens Road, Battersea, London

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Enrique Seller, Calle Huerfanos 761, Santiago, Chile

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FOR DIXON'S AMERICAN GRAPHITE PENCILS, ETC.

National Paper and Type Company, 31-35 Burling Slip, N. Y.
*With Branch Houses in Mexico, Cuba, Peru, Argentine,
Uruguay, Venezuela, Porto Rico and Colombia*

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A. R. MacDougall & Co., Ltd., 468 King St., West, Toronto, Ontario, Can.

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS
Canadian Asbestos Company, Montreal, Quebec, Can.

Your Quickly Flowing Thoughts

may with the greatest speed and ease be revealed by the delightfully smooth and responsive leads in

DIXON'S ELDORADO

"the master drawing pencil"

For every need in writing, accounting and drawing.

Your fingers will be grateful for the "feel"—the ease—the rapidity of the Eldorado.

6B (softest) to 9H (hardest), HB (medium) for general use.

Get a trial dozen from your dealer, or send 10c for full-length pencil, mentioning dealer's name and whether very soft, soft, medium, hard, or very hard lead is desired.

Joseph Dixon Crucible Co.

Established 1827

Dept. 190-J Jersey City, N. J.



Canadian Distributors
A. R. MacDougall & Co., Ltd.
Toronto, Ont.

There is a Dixon-quality pencil, crayon, and eraser for every purpose



What We Are Doing to Advertise

IT may take only two to make a bargain, but it takes three to make a steady sale. It takes the dealer, the consumer and us.

We are not only out to make Dixon's Graphite Transmission and Differential Lubricant a steady seller, but a booming best seller. Because we've got the facts. Because we've got the best lubricant for transmissions and differentials, and because we know that as soon as people understand the superiority of Dixon's Graphite Transmission and Differential Lubricant they are going to demand, stipulate, ask for and insist on Dixon's.

We've got a banner booster advertising campaign. It's a big newspaper, trade and farm paper campaign, telling people just what Dixon's means—and why it is the most efficient transmission and differential lubricant made.

DIXON'S
GRAPHITE
Transmission and Differential
LUBRICANT

Read these ads yourself as they appear. They are full of fact—flashes that will put new life into your cash register. Isn't it a sure thing that as soon as people get the big differ-

ence between the way Dixon's works and the old style ordinary greases, they are going to ask for Dixon's?

Your bank account will fatten up if you offer, suggest and push Dixon's. Explain how the thousands of microscopic indentations on metal surfaces are made smoother and slippery by filling with graphite; how Dixon's lubricates equally well in hot, cold or normal weather; how it lasts longer and renders better service than ordinary grease possibly could.

We are telling this story to your customers. If you'll put your weight into the campaign with us, there's going to be a mighty profitable boom in Dixon's for everybody.

"A JOB FOR EVERY STAR"

THE boys are coming back, and in accordance with the promise made to them by President George T. Smith when they entered the United States Service, they are being assigned to a position at least as good as that which they left.

The following have returned up to the present:

HENRY STEFFENS, *3rd Engineers Training Regiment*, Cost Accounting Department.

JOHN O. ROLLINS, *United States Navy*, Purchasing Department.

VINCENT PETRIE, *United States Navy*, Cost Accounting Department.

A. K. SUTTON, *Machinists' Mate*, *Naval Aviation*, Auto. Lub. Sales Department.

THOMAS WILSON, *47th Battalion United States Guards*, Brass Factory.

FRANK SPINELLO, *3rd Engineers Training Regiment*, Driver.

JOSEPH HUMMILL, *Ordnance Dept.*, *Headquarters Co.*, Driver.

THOMAS EVANS, *16th Infantry Battalion*, Pencil Factory.

HARVEY RAGAN, *United States Navy*, Lubricating Sales Department.

FRED BIRK, *3rd Chemical Battalion*, Laboratory.

WARREN BUDD, *S. A. T. C.*, *Columbia University*, Pencil Department.

THOMAS A. MOORE, *S. A. T. C.*, *Fordham University*, Cost Accounting Department.

NORMAN McDONALD, *Royal Flying Corps*, Brass Factory.

ANGELO VERTUCCI, Pencil Factory.

R. B. VINCENT, *Gas Defense Division*, *U. S. A.*, Philadelphia District Office.

FRANK CYWINISKI, *5th Battalion*, *Aberdeen Proving Grounds*, Crucible Factory.

TONY GREY, *153rd Depot Brigade*, *U. S. A.*, Crucible Factory.

MICHAEL FALLON, *347th Regiment*, *78th Division*, *U. S. A.*, Crucible Factory.

ANTONIO LESMAN, *1st Gas Regiment*, *U. S. A.*, Crucible Factory.

WILLIAM MCFADDEN, *104th Engineers Corps*, Crucible Sales Department.

DAVID YOUNG, *Ordnance Department*, Cost Department.

WILLIAM P. S. BURRELL, *Motor Transport Corps*, Advertising Department.

B. C. AREY, *Field Artillery*, Boston District Office.

H. L. HEWSON, *Lieutenant*, *U. S. Navy*, Railroad Dept.

JOHN FARGO, *334th Field Artillery*, Pencil Factory.

C. A. BRUNGER, *Ordnance Sergeant*, *A. E. F.*, Auto Lub. Sales Department.

TOMAS A. MCCRYSTAL, *U. S. Navy*, Grease Factory.

GEO. E. BROWN, *113th Infantry*, Crucible Factory.

EDWARD E. BACKUS, *335th Field Artillery*, Crucible Factory Office.

WM. J. WARD, *113th Infantry*, Crucible Factory.

A NAVAL officer fell overboard. He was rescued by a deck-hand. The officer asked his preserver how he could reward him.

"The best way, sir," said Jack, "is to say nothing about it. If the other fellows knew I'd pulled you out, they'd chuck me in."—*Sailors' Magazine*.

Dyke's Automobile Encyclopedia

(Ninth Edition)

THE ninth edition of this remarkable book, revised and brought up to date, is just off the press.

For instance, under the heading of "Carburetion," the "Pitot tube" or "plain tube" principle is clearly explained; also such subjects as "hot-spot" carburetion; heating of the mixture; heating of the air; kerosene as a fuel; etc.

The electric, repair and ignition subjects have all been greatly improved and brought up to date. There are many new additions to this edition that are very interesting, such as airplanes and the new Liberty motor.

Mr. Dyke thinks so well of graphite lubrication and Dixon's Graphite Automobile Lubricants that he has included, under the heading "Lubrication," a reference to them, and also explains how flake graphite should be used for cylinder lubrication. This endorsement by such an authority is evidence of the high quality and value of Dixon's Graphite Automobile Lubricants.

This book is worth far more than the price of \$4.00 to any automobile owner. The address of the publisher is A. L. Dyke, Roe Building, St. Louis, Mo.

A Preventable Accident

POWER for January 21, 1919, carries a wonderful illustration of where "an ounce of prevention is worth a pound of cure."

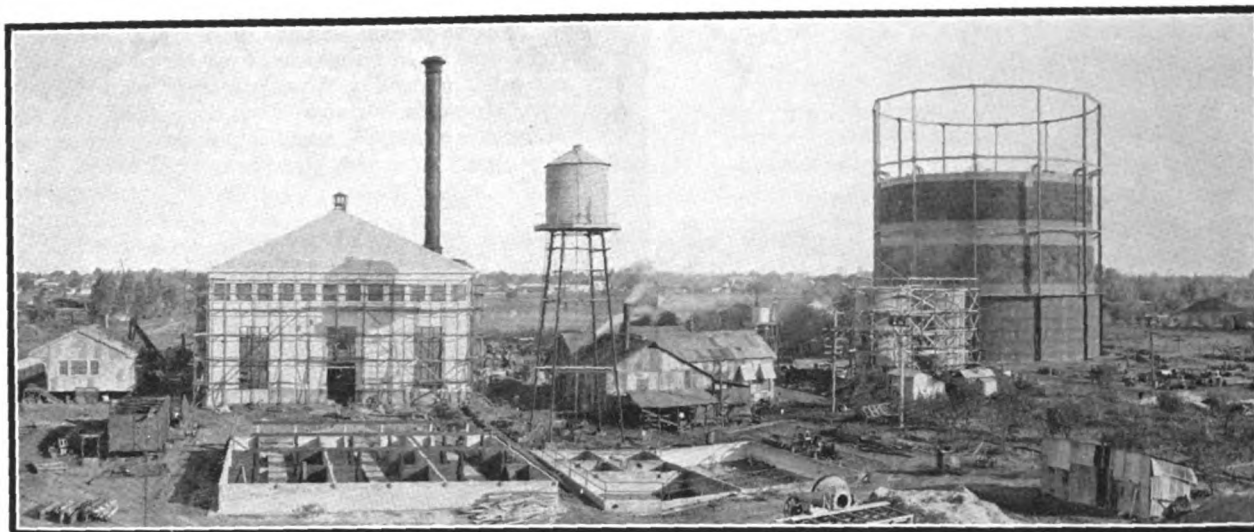
A 2½" gate valve had been stored in the warehouse for nearly a year. In order to remove the nipple without damaging the valve, the mechanic and his helper put the valve in a portable forge fire and proceeded to heat it, the mechanic holding the valve by the end of the stem with a pair of tongs while the helper turned the blower. Without any warning the valve exploded, the two pieces of the body and one disk going in opposite directions, to the right and to the left and away from the workmen, one part carrying away the hood of the forge. The bonnet and stem blew toward the workmen, striking the helper on the arm, and a sliver of brass entered his eye, causing the loss of the sight. The explosion also turned the forge over.

The valve was tightly closed and the pressure built up within the body was prevented from escaping by the two disks and the stem packing. It is not known whether there was any moisture trapped in the body of the valve before heating.

The accident is one that is entirely preventable. Red lead, white lead, and other similar hardening cements are most suitable for any installation where parts are to be taken down. The ideal compound is Dixon's Pipe Joint Compound, because it makes gas, air, water, steam, and oil tight joints which can always be opened without the possibility of injury to the fittings. The base is selected flake graphite mixed with proper vehicles.

It is due to the lubricating character of flake graphite that screwed connections can be drawn to a tight fit, and it is because graphite undergoes no chemical change (sets) that the joints can be opened again with ease.

MANY people are failures because they do not rise above the things that discord and irritate them. Man is so constituted that he does his best work when happiest. He is constructed on the happiness plan. When he is most harmonious and most in tune he is most efficient.—*Wrot's Writings*.



Oil Gas Plant, Pacific Gas & Electric Co., Fresno, California

THIS modern oil gas plant, erected by the Pacific Gas & Electric Company, is rightfully considered a model by Pacific Coast people.

Two million (2,000,000) cubic feet per day is the normal capacity.

The whole equipment, gas generators, purifiers, washers, scrubbers, exhausters, Babcock & Wilcox boiler plant, steel oil tanks, holders of 1,000,000 cubic foot capacity, repair shop pumps, etc., are all of most modern type and designed for sanitary ventilation.

This great plant is protected with Dixon's Silica-Graphite Paint, so favorably known in the gas world, and the Dixon Company is proud that this model plant on the Pacific Coast is wearing Dixon's colors, which give the longest wear and service.

The long life of Dixon's Paint saves in labor charges because frequent repainting is not necessary.

The readers of GRAPHITE will recall that the Dixon Company illustrated, in its January issue of GRAPHITE, electroliters owned by the Pacific Gas & Electric Company, all of which were painted with Dixon's Silica-Graphite Paint.

Golden Jubilee of N. W. Ayer & Son

THE fiftieth anniversary of the founding of the firm of N. W. Ayer & Son was commemorated April 4, 1919, by a banquet at the Bellevue-Stratford Hotel, Philadelphia.

Captains of industry, publishers, editors, including the only living ex-President of the United States, the Hon. William Howard Taft, were present to pay tribute to this firm and to yield personal honors to F. Wayland Ayer.

The key-note of the meeting was that advertising is the greatest constructive force in the world to-day.

One of the features of the jubilee was the presentation of a portrait painting of F. Wayland Ayer to the organization. The presentation was made by Albert G. Bradford, one of the members of the firm. Mr. Ayer was then presented with a testimonial of appreciation signed by the guests present and employees. The testimonial was in the form of an elaborately bound and illustrated autograph book, and bore the following inscription:

To F. WAYLAND AYER, who made a motto and has lived it, who evolved a principle and has practised it, who set an ideal and has attained it.

To perpetuate the memory of Henry Nelson McKinney, a member of the firm who died a year ago, a bronze tablet was presented to the organization and will be placed in the home office.

One of the surprises of the evening came when a group of notable publishers presented a large gold loving-cup to Mr. Ayer.

N. W. Ayer & Son have been the advertising counsel for this Company for many years, and are responsible for all the general magazine and newspaper advertising.

It is not Always Easy

- To apologize,
- To begin over,
- To admit error,
- To be unselfish,
- To take advice,
- To be charitable,
- To be considerate,
- To keep on trying,
- To think and then act,
- To profit by mistakes,
- To forgive and forget,
- To shoulder a deserved blame,

—But it Always Pays.

—McClary's Wireless.

The Colored Lady

IN view of the late controversy on the use of a "colored lady" as a trade-mark in advertising, it may be interesting to many of our readers if we recall a reproduction of an old-time Dixon advertisement and poster which was made by Sarony, Major & Knapp of New York City in 1859. So far as the Dixon Company knows, that was the first lithograph advertisement ever used, and the Dixon Company was among the very first to make use of illustrated advertisements.

It will therefore be seen that the Dixon Company made use of a sort of "Aunt Jemima" many years ago.

◆ ◆ ◆

SAY what you will about the Ten Commandments, you must always come back to the pleasant fact that there are only ten of them.—H. L. Mencken.



Holy Cross Church, Columbus, Ohio

THE metal tower was painted in 1915 with Dixon's Silica-Graphite Paint by Mr. William O. Beede, steeple and stack painter, of 150 North Hague Avenue, Columbus, Ohio.

Mr. Beede writes that the steeple is still in fine condition after four years' severe exposure.

This is Dixon's chief quality—long endurance and reliability. Accordingly it is worth more per gallon, as by lasting longer it saves in labor. Frequent repainting not needed.

Mr. Beede has used Dixon's Silica-Graphite Paint on many church steeples, roofs, and other metal-work in the West, and he is an authority on paint service.

An Appreciation

March 22, 1919.

JOSEPH DIXON CRUCIBLE COMPANY,
Jersey City, N. J.

Gentlemen:

It may interest you to know that, for the past year, I have been using Dixon's Cup Grease and Dixon's No. 677 on my Hudson Supersix. A friend of mine, who has a similar car purchased about the same time, has been using ordinary cup greases on his car; he removed his front wheels at the end of 9000 miles' travel, and found all four of his roller bearings so badly worn and abraded that he had to buy a complete new set.

This alarmed me so that, at the end of 10,000 miles, I removed my front wheels, but found all four sets of bearings in absolutely perfect condition, without even a suggestion of wear.

A pessimistic man might state that my friend did not properly grease his bearings; as a matter of fact, he is a very careful automobilist who personally works over his own car. However, so far as I am concerned, this showing convinces me that Dixon's Graphite Greases are ideal for the purpose for which you recommend them.

Yours very truly,

WM. DINWIDDIE.

An Old Definition

IN the *Workshop Companion, A Collection of Useful and Reliable Hints*, published by The Industrial Publication Company in 1879, the following appears:

"Plumbago: This material is gradually coming into use, and when properly selected and applied it never fails to give satisfactory results. It may be used on the heaviest planers and ocean steamers, or on the lightest watchwork. When applied to delicate machinery the surfaces should be very lightly coated with the plumbago by means of a brush. In this way, all danger of grit is avoided. Plumbago seems to be specially adapted to diminish the friction between porous surfaces, such as wood and cast-iron. For the cast-iron beds of heavy planers it is a specific."

Plumbago and graphite are synonymous terms. Since 1879 great strides have been made by the Joseph Dixon Crucible Company in graphite lubrication. The prophecy of 1879 has been more than fulfilled and to-day the Dixon Graphite Lubricants are standard with all classes of trade. We make special Dixon Lubricants for delicate machines such as phonographs, up to specially prepared lubricants for the heaviest kind of work, including gold dredges, etc.

We use in the Dixon Lubricants only the selected Ticonderoga Flake Graphite from our own mines. This graphite is different from any other graphite on the market in that it is of a thinner flake and has more lubricating qualities.

Railroad and Steamship Operation by the United States Government

J. H. ROSSITER, director of operations of the United States Shipping Board, in an address before the American Manufacturers' Export Association, is quoted in the papers as saying:

"Government operation is impracticable and prejudicial so far as it concerns railroads. As to ships, it is utterly impossible. In unscrambling the railroads I trust it will be arranged so that we will have at least two competitive lines to all the principal ports of export and import; and as to ships, that it will be arranged by a sort of franchise system so that lines will be encouraged and supported if necessary by the Government in consideration of regular sailings, announced a year in advance, and that the Government maintain a control of maximum rates.

"Now that war is past we are still facing a very grave situation because we have not sufficient tonnage for our national requirements. Every day for weeks and months past I have had insistent demands for ships, and notwithstanding that we have new tonnage coming to hand at the rate of 15,000 tons a day, I find myself utterly unable to take care of the situation."

Mr. Rossiter's speech was very comprehensive and very

enlightening, and brought much applause from the several hundred members of the Export Association who were present.

He laid emphasis on the necessity of strengthening industry and making it a leading American institution, and made light of reports that the United States with the present cost of labor and materials, cannot successfully compete with Great Britain and other countries in the construction and operation of steamships.

How to Meet the Coming Reaction

MR. BABSON tells us that we must realize the unsoundness of present fundamental conditions, and cease trying to fool ourselves by listening only to optimistic opinions. The reason why some of the panics of the past years have been so disastrous was because business men refused to recognize and correct conditions which made a general collapse possible. He tells us that the present situation makes it necessary for us to consider conservation and constructive effort.

He tells us that our sales managers should focus sales efforts on the good territory, and that all territories are not equally good for business. A greater degree of caution must be adopted in regard to munition centers and other industrial localities, which are first to feel the loss of war business.

Mr. Babson tells us further to make liberal use of advertising reserves which were set aside during the boom times of the past two years. Advertising is selling, and every legitimate means of selling goods should now be called into play. He adds that this is one of the best preventives of business depression.

He tells us to strengthen our sales force. During the period of great prosperity salesmen became soft and indifferent. It has been rightly said that goods sold themselves. The coming months will require all the sales effort and ingenuity which can be mustered.

Mr. Babson, as well as many others whose business it is to make a study of economic conditions, points out that we must develop our foreign trade. There are certain difficulties in getting foreign trade at this time. Nevertheless, opportunities do exist, and as business becomes harder to secure in the United States the importance of foreign trade opportunities will grow proportionately.

The concern that markets goods only in one State of the Union will feel the lull in business a great deal more than that manufacturer who has the entire trade of the United States at his command; and that manufacturer who has the opportunity of marketing his goods in all civilized parts of the world will be in better position to pay dividends and to increase his business than he who has only one country or perhaps only one State as his territory.

Mr. Babson wisely tells us that it is quite important that we should come into close contact with our customers and educate them so that they will understand the fundamental situation which exists and will make their plans accordingly.

Mr. Babson considers that the popular idea that the trade must be kept optimistic is a mistaken one. It is short-sighted to fool the customer by painting a rosy picture of the present outlook and to induce him to buy largely when he should buy in a conservative way.

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SLEEPING may endure for a night, but the clattering milk-bay cometh in the morning.—*McClary's Wireless*.

Advantages of Dixon's Graphite Pipe Joint Compound

THREADED joints that are gas-tight, permanent and easy to open can be made by using Dixon's Graphite Pipe Joint Compound. This is made in paste form from selected flake graphite and a vehicle. The experience of many years of producing this and the use by many of the largest railroads and gas companies have carried it to a high state of development. Because of the graphite used in its manufacture, threads can be screwed up a little more than with any other compound and the fineness of the graphite allows it to fill up the little cracks in the threads, giving a very tight joint. As graphite is inert to all known reagents, such as acids and alkalies, the metals are protected very thoroughly from all kinds of corrosion. To burn graphite requires a temperature of 1400 to 1500 degrees Fahrenheit and pure oxygen, which makes the likelihood of burning out very small.

The compound is smeared on the threads and then screwed up into the fitting, thus giving a very uniform coating throughout. The use of this compound on long sections of pipe keeps up the gas pressure by preventing the troublesome leaks found along the lines. In addition the ease with which the joints can be unscrewed makes it vastly superior to either red lead or white lead, which depend for their effect on the hardening of the cement. For use around the retort doors where heavy asbestos gaskets are used, the compound gives the necessary lubrication so that the doors open easily without tearing the gaskets apart or injuring them. Here also it acts as a preventive of corrosive action and keeps the asbestos packing in fine condition for a much longer time than is otherwise the case.

The advantages this compound has over red or white lead and other cements are the tight joints possible, the ease of opening and the greater bulk. This compound for an equal weight has fully three times the volume, which means three times the number of fittings can be put together. Flanges, ground connections, cylinder heads—in fact, wherever metal surfaces come together tightly—can have Pipe Joint Compound used to good advantage.

This material is put up in small tubes, one to twenty-five pound cans, and kegs of 50 and 100 pounds. Circulars and prices may be obtained from Dept. 190-D.

Melter's Excuses for Poor Melting

- | | |
|----------------------------------|--|
| 1. Coke no good. | 24. Stockman, too much vino. |
| 2. Pig too fat. | 25. Stockman ran elevator through roof. |
| 3. Scrap too large. | 26. Cupola breast gave way. |
| 4. Fire brick too soft. | 27. Forgot to put coke in cupola. |
| 5. Wind from the north. | 28. Tried to melt with wood. |
| 6. Fire wouldn't light. | 29. No more oil. |
| 7. Iron got in tuyeres. | 30. Lining fell out of cupola. |
| 8. Elevator broke down. | 31. Forgot to ram sand in cupola bottom. |
| 9. Cupola bottom fell out. | 32. Somebody dropped the bottom. |
| 10. Cupola sprung a leak. | 33. No good melt, Friday the 13th. |
| 11. Wind pipe fell off. | 34. Slag ran out charging door. |
| 12. Blower bearing ran hot. | 35. Tuyeres all burned up. |
| 13. Coke too small. | 36. Cupola not designed properly. |
| 14. Fuse blew out. | 37. Tuyeres are too small. |
| 15. Belt slipped. | 38. Helper fell in cupola. |
| 16. Sulphur in coke. | 39. Rotten luck. |
| 17. Forgot to light up. | 40. Put in iron—slag came out. |
| 18. No more coke. | —Chippings. |
| 19. Not enough stickum in clay. | |
| 20. Fire-wood too wet. | |
| 21. Not enough wind. | |
| 22. Brick fell on melter's head. | |
| 23. Rock got in melter's eye. | |



John M. Ready

THERE is no particular need to give any name to the above, but to the very few in the United States who do not happen to know the gentleman, we will say that it is a very fair likeness of Mr. John M. Ready, representative of the Joseph Dixon Crucible Company in Greater New York and in some of the outlying neighborhoods.

At the present writing, Mr. Ready looks somewhat younger than shown in the photo above, as he is enjoying a long, restful, and invigorating vacation on the Pacific Coast. Mr. Ready had in mind, when he started out, to take a trip to China and Japan, but is no sailor, except when seas are smooth and vessels are big.

One great advantage Mr. Ready has over the ordinary traveler is the fact that the United States was his old-time stamping ground when he was a traveling salesman. Throughout the country he has a wide acquaintance and innumerable friends who are more than anxious to entertain him and to cut down hotel expenses.

When it became known in New York that Mr. Ready was about to take a vacation, the Jobbers' Association of the National Association of Stationers and Manufacturers appointed a committee, consisting of Messrs. Whittemore and Jonas, to make up a little luncheon in honor of Mr. Ready, and at that luncheon he was presented with a very useful souvenir and remembrance in the shape of a walking-stick. The cane is a beautiful piece of work with an engraved name-plate, suitably inscribed.

Not to be outdone in giving Mr. Ready a nice send-off, his office staff presented him with a handsome illuminated dial traveling clock, as a small testimonial of the esteem in which he is held by his employees.

Mr. Ready tells us to remember—

"There is nothing in this world so good

As Warm, Fraternal Brotherhood."

It is because of Mr. Ready's warm, fraternal brotherhood that he is beloved by all who have had the opportunity of coming within the atmosphere of his friendship.

Old-Established Houses

COMMERCIAL statistics, we are told, present the fact that one business enterprise of every two hundred and some odd lives a generation of thirty-five years.

Very few concerns that are from forty-five to sixty years old appear "as youthful and active as at twenty-five." The rest show signs of various degrees of decadence and decrepitude, like men of that age.

In 1914 a national business expert made the statement that in the whole United States there were less than four hundred businesses a century old.

There are some business concerns that are simply the echo of their founder and their younger life. They no longer make the "big noise" which comes from active and up-to-date workers. There are some old concerns that stand out well as monuments but on which the moss is growing and on which there is no record of new and worthy achievements carved each year.

The Joseph Dixon Crucible Company was established in 1827 and is therefore in its last decade of the century mark. Please note that we did not say "decadence," as the Dixon Company, to some extent, is just making its proper stride. It is reaching out as never before in directions other than stove polish and black-lead crucibles from which it took its name of "Crucible Company." While in a small way the Dixon Company for the past fifty years has done an export business, in years to come the Dixon Company will probably be as well known throughout the entire world as it is throughout the United States.

On February 8th, a representative of the Company left New York on a trip eastward from New York which will be continued eastward until he shall again arrive in New York City across the United States.

That representative will make a careful study of conditions and be on the lookout for possible fields for Dixon's Graphite Products as well as proper selling agencies.

There is another old house that has also been in close touch with the Joseph Dixon Crucible Company. We refer to The De Vinne Press, which has had an uninterrupted continuance of high-grade printing since its foundation in 1836.

There is not a piece of machinery, not a font of type remaining in the De Vinne establishment that was there in 1908. This is a bit of evidence of what is needed to be done to keep up with the times.

Similar changes have been followed by the Dixon Company. No longer do we make pencils as we did even twenty-five years ago. Methods of stamping, methods of treatment in every direction have changed for the better. Where, twenty-five or thirty years ago, we had no thought of the necessity of chemists and experts, to-day the Dixon Company has chemists and mechanical experts that have been carefully trained at college and have had long experience in practical work.

The De Vinne Press is mentioned in this article in connection with the Dixon Company for the reason that The De Vinne Press did printing for the Dixon Company over fifty years ago and still does its printing. This publication, GRAPHITE, is printed by The De Vinne Press, and the relations between The De Vinne Press and the Dixon Company for a half century, or more, have been of the closest and pleasantest type.

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DID you ever notice how delightfully some people can entertain themselves, so long as they can induce you to listen to them doing it?—*McClary's Wireless*.



Attractive Window of Root, Neal & Co.

THE above photo shows a very attractive window display of Dixon's Solid Belt Dressing made by Root, Neal & Co., Buffalo, N. Y.

The display consists of large dummy packages of Solid Belt Dressing that are exact reproductions of the actual package.

This display window is right on Main Street, and created a great deal of attention from passers-by. So pleased were Root, Neal & Co. with the result of this display that several photos were taken of it and sent to us for use.

The Pull

"THIS is my son," the Captain said,
 "And this my ship," said he;
 "So give him the helm and let him steer,
 That he may learn the sea."

"Aye, aye," said the Mate, "but the job is one
 For men who know the trade."
 But the Captain scorned the Mate's advice.
 "Let him steer the ship," he said.

So that was the ship the breakers caught,
 That stranded and washed ashore;
 A ship that had weathered many a gale,
 On many a trip before.

And the reason it lies upon the beach,
 Half buried in the sand,
 Was the act of giving a man a job
 He didn't understand.

Oh, whether it be an ocean craft,
 Or a business enterprise,
 Or whether it be a son or a friend,
 This law of life applies:

The use of power to set a man
 At a task he doesn't know,
 Is often a very costly whim,
 As the records of such will show.

OWEN BAY, in *Life*.



Repays Sales Effort

WITHIN the past fifteen months, Mr. Frank H. Uebenheim, the proprietor of the thriving stationery store of which the office portion is reproduced here-with, has built up a business with Dixon's ELDORADO—"the master drawing pencil" that has proven beyond a doubt to this enterprising dealer the exceptional worth to his business of this American-made pencil.

Mr. Uebenheim's capacity for getting 100% value out of any item of his stock is indicated by the businesslike appearance of his own office space, showing Mr. Uebenheim seated in the rear, with his assistant, Mr. Stern, at the left, and the stenographer opposite making use of up-to-date disappearing typewriter equipment. It is needless to say that this stationer has taken to heart the Selling Guide which is furnished to all ELDORADO dealers, which makes clear that this pencil is not alone a draftsman's tool, but can readily be made the choice of a large part of every business man's pencil purchases for all of his office requirements, as well as readily sold to the individual buyer of a single pencil or a dozen pencils. With the ELDORADO definitely approved by the most critical architects, artists, and engineers, it is a most natural step to introduce it to the business trade; and of course with ELDORADO, as with other items of stock, it is turn-over and quantity sold that count. Mr. Uebenheim's choice of the Dixon line is due to two facts—his own knowledge of pencils and the exacting demands of his trade. We might mention that Mr. Uebenheim arranged a very attractive window display with the assistance of the electric flash sign which the Dixon Company has prepared to place with dealers, and this undoubtedly contributed toward introducing the pencil thoroughly to his fellow-townsmen.

Pity the Poor Kings

"THINGS seem crowded here in Switzerland."
 "Yes, sir," said the landlord, "they are."
 "All sorts of people about."
 "Quite so, sir. Do you mind rooming with an ex-king?"
 —*Judge*.

A GEORGIAN from up in the mountains came to town on his annual trip with a load of produce to exchange for groceries. As he neared the city he saw a sign: "Speed Limit 15 Miles an Hour." Prodding his oxen with a stick, he muttered: "By golly! I don't believe we can make it."—*Wroe's Writings*.

Real Brush Service

Henderson, Minn.,
Mar. 5, 1919.

Gentlemen:

Have you more than one grade of graphite brush on the market? We have been using the Dixon Graphite Brush with so much success that we would like to buy another set of brushes of the same grade.

These brushes we have here were purchased about twelve or fourteen years ago.

Thanking you in advance, we remain,

Truly yours,

HENDERSON ELECTRIC LIGHT
PLANT,

(Signed) LEO HERRMANN, JR.,
Supt.

"Greatest Satisfaction"

THE following letter is only one of the many we receive from Fire Departments of various cities testifying as to the value of Dixon's Graphite Automobile Lubricants in this particularly strenuous service:

March 25, 1919.

Dear Sirs:

We are using and have used Dixon's Motor Graphite Lubricants on the motor apparatus in this Department for the past five years, and same has given the greatest of satisfaction. Our apparatus includes an American La-France type 12 pumper, to which this lubricant is especially adaptable.

Respectfully,

(Signed) PHILLIP C. LEAS,
Chief, Mankato Fire Dept.

Dixon's Crayons for Prize-Winning Work

Feb. 21, 1919.

Gentlemen:

Last May I obtained two boxes of Dixon's BEST Crayons to use on maps for Fair Work. My pupils' work took all the First Premiums. Those crayons cannot be surpassed for Map Work. They made quite a hit with the judges and other teachers, and they are desirous to know from what jobber or School Supply House they can obtain your material.

Hoping to hear from you immediately as to where we can secure your supplies, I remain,

Yours very truly,

LULU M. SWANK.

A Forty-Year Paint User

THE Dixon Company is proud to reproduce a letter received from Mr. Henry Weiler, Sr., of Dunkirk, N. Y.

Forty years ago my house was built and roofed with tin. In all these years never a leak. Reason—every three years a coat of Dixon's Silica-Graphite Paint.

Please send me 5 gallons and include in shipment a quantity of Dixon's Automobile Lubricants.

(Signed) HENRY WEILER, SR.

Mr. Weiler, like Dixon's Silica-Graphite Paint, qualifies A1 in upkeep standards. He uses the best paint and nothing else, and he uses it rather more frequently than most people, for some users let Dixon's go for several years longer. But Mr. Weiler takes no chances, and his satisfaction is equal to the record of this world-wide known protective paint.

For exposed metal or wood surfaces, Dixon's Silica-Graphite Paint is the best and most economical per year. It LASTS LONGER. You don't waste labor in having to repaint so frequently. It is guaranteed FIRST QUALITY only. It is an American pigment, Nature's foliated union of the flake silica-graphite, and gives wonderful cling, wear, and elasticity. A mechanical mixture of silica and graphite is never a success.

Be sure you use Dixon's Silica-Graphite Paint. Specify and inspect it.

Paint Insurance

THE American Paint & Oil Dealer of St. Louis, of which Mr. Charles Allen Clark is the widely known editor, says in its February, 1919, issue:

"Statistics show that more buildings are razed annually in the United States as a result of lack of paint than as a result of fires. And fire insurance only affords protection against possible loss, while failure to paint means lack of protection against certain loss."

Character Told by Pencil Sharpening

IT is often the little things that children do which give the best indications of what their future characters will be. In work and play the sort of man and woman the child will become is daily unfolded.

In such a small matter even as the

sharpening of a pencil valuable hints may be obtained by anyone in the least observant. Here it may easily be discovered whether a boy or girl is careful, destructive, wasteful or economical.

The boy, for instance, who sharpens his pencil into a stub is inclined to be economical, careful and quick in after life. The boy or girl who takes an inordinately long time to make a slender point, cutting very precisely and regularly all the time, will usually prove to be of an artistic and dreamy disposition. The child who, regardless of the look of the pencil, gouges out great pieces in order to get to the lead, will show impulsiveness and generosity.

Mere destructiveness, however, becomes apparent when a child takes a delight in sticking his knife in his pencil and splitting it—or destroying it in some other way.—*Boston Post*.

Number of Telephones

AT the end of the calendar year 1917 there were in use in the United States 11,713,228 telephones. The number of calls made during the year is estimated at 21,842,000,000, an average of more than 200 for every man, woman, and child in the country.

The number of employees engaged in the telephone service in that year was 262,622. Their salaries and wages aggregated \$175,668,229. The expenses and income charges were \$319,116,293. The total value of plant and equipment amounted to \$1,492,230,081.

League of Nations

THE way some people talk of the League of Nations, pro and con, reminds us of a certain verse:

"All craftsmen who have seen my fate
Pray, profit by its ending;
Though all's not sound within the
state,

That's not our kind of mending.
And when we drop our humble tools

And set us up as thinkers,
We look the sorry lot of fools
That statesmen would as tinkers."

GRAPHITE will therefore omit all opinions on state and world questions and talk only of graphite products—crucibles, lead pencils, silica-graphite paint, lubricants, etc.

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"Does your son who is abroad with the troops understand French?" "Oh, yes; but he says the people he meets there don't seem to."—*McClary's Wireless*.

American Manufacturers

Fail to Acknowledge Receipt of
Foreign Orders

UNITED STATES CONSUL
WILBUR T. GRACEY, at
Monterey, Mexico, with whom the
Dixon Company has had some very
pleasant business relations, calls our at-
tention to the fact that local firms are
experiencing difficulty in securing ac-
knowledgments of orders sent by them
to the United States.

This is a condition which was prev-
alent prior to the war, but with the
added difficulties of trade extending to
present conditions, the situation has
been very much intensified.

It appears that firms in Monterey
send orders to the United States and
get no replies for several weeks or
months, and in some cases numerous
telegrams are sent without any re-
plies being received.

The failure to acknowledge receipt
of orders causes a great deal of quite
unnecessary trouble and anxiety, and
it is believed that if American manu-
facturers could be brought to realize
how important it is for buyers in vari-
ous countries to know as soon as pos-
sible if their orders have been received
and are receiving attention, and, if pos-
sible, the approximate date when goods
might be shipped, it is probable that
greater care would be taken in the mat-
ter.

Logical Wish

ON the outskirts of Philadelphia is
an admirable stock farm. One
day last summer some poor children
were permitted to go over this farm,
and when their inspection was done, to
each of them was given a glass of milk.
The milk was excellent.

"Well, boys, how do you like it?"
the farmer said, when they had drained
their glasses.

"Fine," said one little fellow. Then
after a pause, he added, "I wisht our
milkman kept a cow."—*Journal of the
American Medical Association.*

Hard to Explain

TYPEWRITER to the Pencils
said,

"Now will you tell me, please,
Why, when I have no doors nor locks,
I have so many keys?"

"We do not know," the Pencils said;

"It's queer as quadrupeds!

But can you tell us why we wear
Our rubbers on our heads?"

—Clara Odell Lyon.

GOLDEN BOUQUETS

OR WHY

DIXON'S
ELDORADO

"the master drawing pencil"

SHOULD BE USED

A Merchant writes:

"WE are using your pencils in the office
and on the floor; we find that they
last longer and give better satisfaction
than a cheaper pencil."

An Office Worker says:

"RECEIVED samples and like ELDO-
RADO just fine; would be glad to be
able to buy them locally."

From an Editor:

"THE pencils sent us some time ago ar-
rived and have been used ever since.
We find them *superior to any others*
for our work, being entirely free from
grit, smooth and black. We wish to
thank you for the favor as we have
been converted to the use of ELDO-
RADO pencils."

A School Supervisor says:

"I HAVE tried the sample of drawing
pencils which you sent me and find that
they are excellent in quality and very
smooth in their marks. I shall recom-
mend them for use."

A Manufacturer writes:

"WE thank you for the samples of EL-
DORADO pencils which you sent us
some time ago and wish to state we are
in the habit of purchasing our supply
from the —, and will in the near
future place an order with them for a
small quantity of these pencils. If they
do not have these, they will probably
get them for us. We hope we shall be
able to secure these as we want them,
for we found them to be the *best pen-
cils we ever had for the bookkeeper's
work.*"

An Engineer says:

"I HAVE just finished drawing a com-
plete set of detailed working drawings
for a new type of Ball Mill for crush-
ing ore. This was a three-weeks' job
and I used your ELDORADO pencils
throughout for my pencil work. I
found them very satisfactory."

An Elevator Manufacturer says:

"HAVE received the samples of Dixon's
ELDORADO pencils, for which please
accept thanks. These are certainly very
excellent pencils."

A Steel Wire Maker says:

"PLEASE be advised that we found your
ELDORADO pencil very satisfac-
tory."

From a firm of Architects-Engineers:

"WE have found the samples of EL-
DORADO pencils which you sent us
to be very satisfactory. We have just
placed our re-fill order for 17 gross of
your pencils."

A Steel Company says:

"I BEG to acknowledge receipt of your
letter of the 6th inst. enclosing samples
of your ELDORADO pencils. I
must say they are all you claim for
them."

An Accountant writes:

"SINCE inspecting and using the sam-
ples of Dixon's ELDORADO pencils
recently sent us, we desire to extend a
word of commendation for the pencil.
It is a *superior pencil in every respect*
to the majority of pencils now on the
market."

An Electric Co. writes:

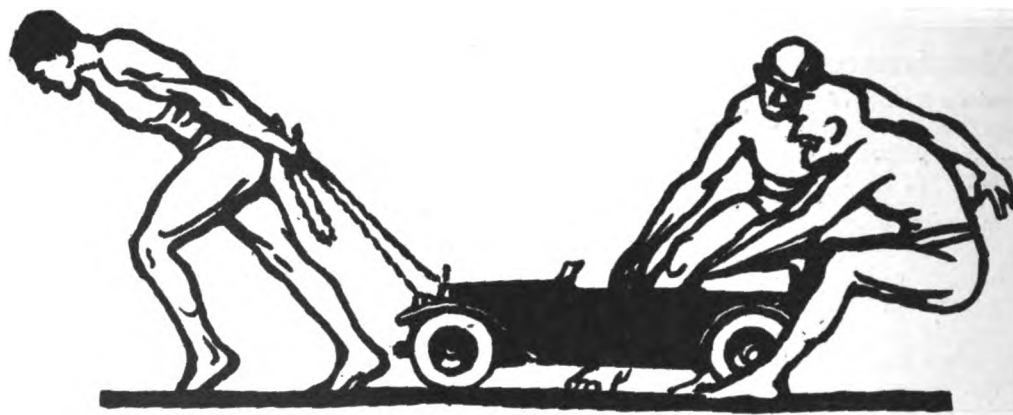
"BEG to advise that we are using your
ELDORADO drawing pencils in our
Drawing Department and find them
very satisfactory. We are purchasing
from —."

A large Motor Maker says:

"IN reference to sample of Dixon's
ELDORADO drawing pencils sent us,
wish to state that we have been using
Dixon drawing pencils in this office for
the past six months and are very well
pleased with same."

A Railroad's Choice:

"WE are using this ELDORADO
pencil exclusively. It is the best yet."



Take Care of the Go-Betweens

~ Your transmission and differential are the go-betweens in the constant fight of *Power* against *Resistance*.

Power—from the motor—is constantly endeavoring to move your car forward.

Resistance—from the road and the air and the weight of the car—is constantly endeavoring to hold it back.

And the battle takes place in the transmission and differential cases—where the two forces meet. That's where the work is done—and that's where *Power* must be aided by proper lubrication.

Dixon's Graphite Transmission and Differential Lu-

bricant is made specially to meet a difficult lubricating problem like that.

It stands to its post under the tremendous pressure that must be met—and conquered—in this hard, gruelling work.

It stays on the gears just as faithfully when they are *not* moving as when they *are* in action.

It lubricates just as well under extremes of temperature as under normal conditions. And it makes your whole car run easier and last longer.

Ask for Dixon's Graphite Transmission and Differential Lubricant—and insist upon getting it.

DIXON'S
GRAPHITE
Transmission and Differential
LUBRICANT

Ask your dealer about Dixon's various lubricating products, including the famous Cup Grease

Write for Booklet 190-G



JOSEPH DIXON CRUCIBLE COMPANY
Jersey City, New Jersey

Established 1827



THE DE VINNE PRESS
NEW YORK

RAL LIBRARY

UN 12 1919

IV. OF MICH.

Graphite

VOL. XXI

JUNE 1919

NO. 6



JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED 1827 Jersey City, N. J., U. S. A. INCORPORATED 1868

**Miners, Importers and
Manufacturers of Graphite,
Plumbago, Black Lead**

DIRECTORS

GEORGE T. SMITH GEORGE E. LONG
WILLIAM G. BUMSTED EDWARD L. YOUNG
J. H. SCHERMERHORN HARRY DAILEY
ROBT. E. JENNINGS

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GEORGE E. LONG *Vice-President*
J. H. SCHERMERHORN *Vice-President*
HARRY DAILEY *Secretary*
WILLIAM KOESTER *Treasurer*
ALBERT NORRIS *Ass't Sec'y & Ass't Treas.*

PURCHASING AGENT

JOHN I. McCOMB

OFFICES AND SALESROOMS

NEW YORK SALESROOM 68 Reade Street
PHILADELPHIA SALESROOM . . . 1020 Arch Street
SAN FRANCISCO SALESROOM . . 155 Second Street
CHICAGO OFFICE . 1323 to 1327 Monadnock Block
BOSTON OFFICE . . 347 John Hancock Building
ST. LOUIS OFFICE 501 Victoria Building
BUFFALO OFFICE, 409 Erie County Savings Bank Bldg.
ATLANTA OFFICE 225 Peachtree Street

EUROPEAN AGENTS

Graphite Products, Ltd., 218-220 Queens Road, Battersea, London

SOUTH AMERICAN AGENTS

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS

ALFREDO J. EICHLER, *General Agent*

Agent for Argentine, Uruguay and Paraguay

E. H. Blanchard, 185 Paseo Colon, Buenos Aires

Agent for Chile, Peru, Ecuador and Bolivia

Enrique Seller, Calle Huerfanos 761, Santiago, Chile

Agent for Brazil

M. V. Powell, Rua Directa 7, Sala 68, São Paulo, Brazil

CUBAN AGENT

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS
William Croft, Room 424 Lonja del Comercio, Havana

Agent for Porto Rico, Virgin Islands and San Domingo

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS
H. Glyde Gregory, Royal Bank Building, San Juan

LATIN-AMERICAN AGENTS

FOR DIXON'S AMERICAN GRAPHITE PENCILS, ETC.

National Paper and Type Company, 31-35 Burling Slip, N. Y.

With Branch Houses in Mexico, Cuba, Peru, Argentine, Uruguay, Venezuela, Porto Rico and Colombia

CANADIAN AGENTS

FOR DIXON'S AMERICAN GRAPHITE PENCILS, ETC.

A. R. MacDougall & Co., Ltd., 468 King St., West, Toronto, Ontario, Can.

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS
Canadian Asbestos Company, Montreal, Quebec, Can.



Heavy Gears Need a "Real" Grease

It takes an unusual grease to lubricate heavy gears properly—an extraordinary grease—like Dixon's Waterproof Graphite Grease.

Pinions can't throw this grease off—no matter how they jump. It is never wasted by dripping, either. Yet there's nothing about it that makes it sticky or gummy.

DIXON'S Waterproof Graphite Grease

has just the right body to stay where it is put—and to lubricate for the longest possible time.

You will find it highly satisfactory for heavy gears, pump plungers, elevators, piston rods, etc.

For further facts write for Booklet No. 190-W.

Made in Jersey City, N. J., by the

JOSEPH DIXON CRUCIBLE CO.



Established 1827



There's Something to Think About Here

The most economical paint for you to use is the longest service paint. Labor for repainting is far more costly than the slightly higher price per gallon asked for the best protective paint.

DIXON'S Silica-Graphite Paint

for over Fifty Years has held the record for being the longest service paint. It is made in First Quality only. You do not have to bother with different grades.

A natural union of flake silica-graphite is the only pigment used. The vehicle is pure boiled linseed oil.

Write for Booklet No. 190-B and long service records.

Made in Jersey City, N. J., by the

JOSEPH DIXON CRUCIBLE CO.



Established 1827





FEW American businessmen could be found who would not quickly and

For a Larger, Better Office Output

tion is more noticeable of the larger things. What is true of these, how-

ever, is also true of the smaller things. In the office, for example, better grades of paper, ink, pens and so on are tried and then maintained as their heightened efficiency is demonstrated.

accurately define the strictly American verb "to scrap." The process of scrapping in an American shop or factory, which means the ousting of one certain tool or machine or instrument to make way for a better tool or machine or instrument, is common in all production departments of our business, big and little. It has come to be a characteristic, this way we have of seizing the newer and quicker and better methods of producing.

This brings us to the precise point we want to make—that it is an expression of this spirit which is putting Dixon's ELDO-RADO into so many offices where before a less perfect pencil was used. For the EL-DORADO eases and quickens the daily written output of the clerk, bookkeeper, stenographer, secretary, assistant, or executive that uses it. The ELDORADO is a writing tool of the highest efficiency. And as such its use, already wide and rapidly expanding, is bound to spread quite generally to office organizations which insist on a *maximum* output of the *first* quality.

In the foregoing paragraph we speak about the production end. To perhaps as great an extent what is said there can be repeated about the office organizations. We see improvements in systems and devices going on constantly in our offices, the older and slower making place for the newer and quicker and better.

In both the shop and the office this evolu-

"A JOB FOR EVERY STAR"

THE boys are coming back, and in accordance with the promise made to them by President George T. Smith when they entered the United States Service, they are being assigned to a position at least as good as that which they left. The following have returned up to the present:

B. C. AREY, *Field Artillery*,
Boston District Office.

H. W. ARMSTRONG, *Regimental Sgt.-Major*,
312th Infantry, A.E.F.,
Crucible Department.

RALPH ALFONSO, *Depot*
Brigade, Color and Lead
Department.

EDWARD E. BACKUS, 335th
Field Artillery, Crucible
Factory Office.

FRED BIRK, 3rd Chemical
Battalion, Laboratory.

WARREN BUDD, S.A.T.C.,
Columbia University,
Pencil Department.

GEO. E. BROWN, 113th In-
fantry, Crucible Factory.

C. A. BRUNGER, *Ordnance*
Sergeant, A.E.F., Auto.
Lub. Sales Department.

WILLIAM P. S. BURRELL,
Motor Transport Corps,
Advertising Department.

G. H. BOWLEY, *Naval Re-*
serve, Pencil Department.

FRANK CYWINISKI, 5th
Battalion, Aberdeen
Proving Grounds, Cru-
cible Factory.

H. N. COONS, Co. A, 53rd
Infantry, A.E.F., Pencil
Sales Department.

STEFEN DUBNOWSKI, 606th Engineers, Color and Lead
Department.

THOMAS EVANS, 16th Infantry Battalion, Pencil Factory.

HARRY D. ERICKSON, 14th Engineers (Light Railway),
Traffic Department.

MICHAEL FALLON, 347th Regiment, A.E.F., Crucible
Factory.

JOHN FARGO, 334th Field Artillery, Pencil Factory.

ANDREW FESTA, Camp Humphreys, Color and Lead De-
partment.

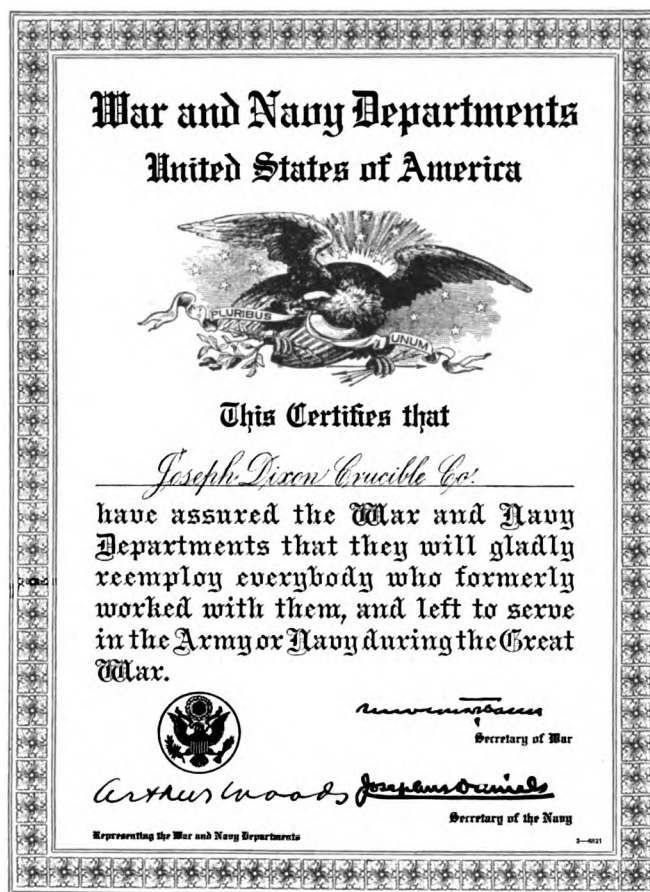
TONY GREY, 153rd Depot Brigade, U.S.A., Crucible
Factory.

WM. J. HAMILTON, Sgt.-Major, Engineers' Corps, Credit
Department.

JOSEPH HUMMILL, Ordnance Dept., Headquarters Co.,
Driver.

H. L. HEWSON, Lieut., U. S. Navy, Railroad Department.

GEORGE HEATHER, 47th Infantry, Color and Lead Factory.



(Reproduction of original awarded by the War
and Navy Departments)

WILLIAM KIRCHNER, 59th
Pioneer Infantry, A.E.F.,
Color and Lead Depart-
ment.

ANTONIO LESMAN, 1st Gas
Regiment, U.S.A., Cru-
cible Factory.

THOMAS A. MCCRYSTAL,
U. S. Navy, Grease Fac-
tory.

J. J. MONAHAN, Hdq. Co.,
346th Infantry, Auto.
Lub. Sales Department.

WILLIAM MCFADDEN,
104th Engrs. Corps, Cru-
cible Sales Department.

THOMAS A. MOORE, S.A.
T.C., Fordham Univer-
sity, Cost Accounting
Department.

NORMAN McDONALD,
Royal Flying Corps,
Brass Factory.

VINCENT PETRIE, U. S.
Navy, Cost Accounting
Department.

JOHN O. ROLLINS, U. S.
Navy, Purchasing De-
partment.

HARVEY RAGAN, U. S.
Navy, Lubricating Sales
Department.

ANDREW RODACK, Aircraft
Battery (67th), Color
and Lead Department.

HENRY STEFFENS, 3rd Engrs.' Training Regiment, Cost
Accounting Department.

A. K. SUTTON, Machinists' Mate, Naval Aviation, Auto.
Lub. Sales Department.

FRANK SPINELLO, 3rd Engrs.' Training Regiment, Driver.

WILLIAM SULLIVAN, 347th Infantry, A.E.F., Color and
Lead Department.

JOHN F. STIER, 336th Machine Gun Battalion, Pencil
Factory.

SAM VITALI, 158th Infantry, Pencil Factory.

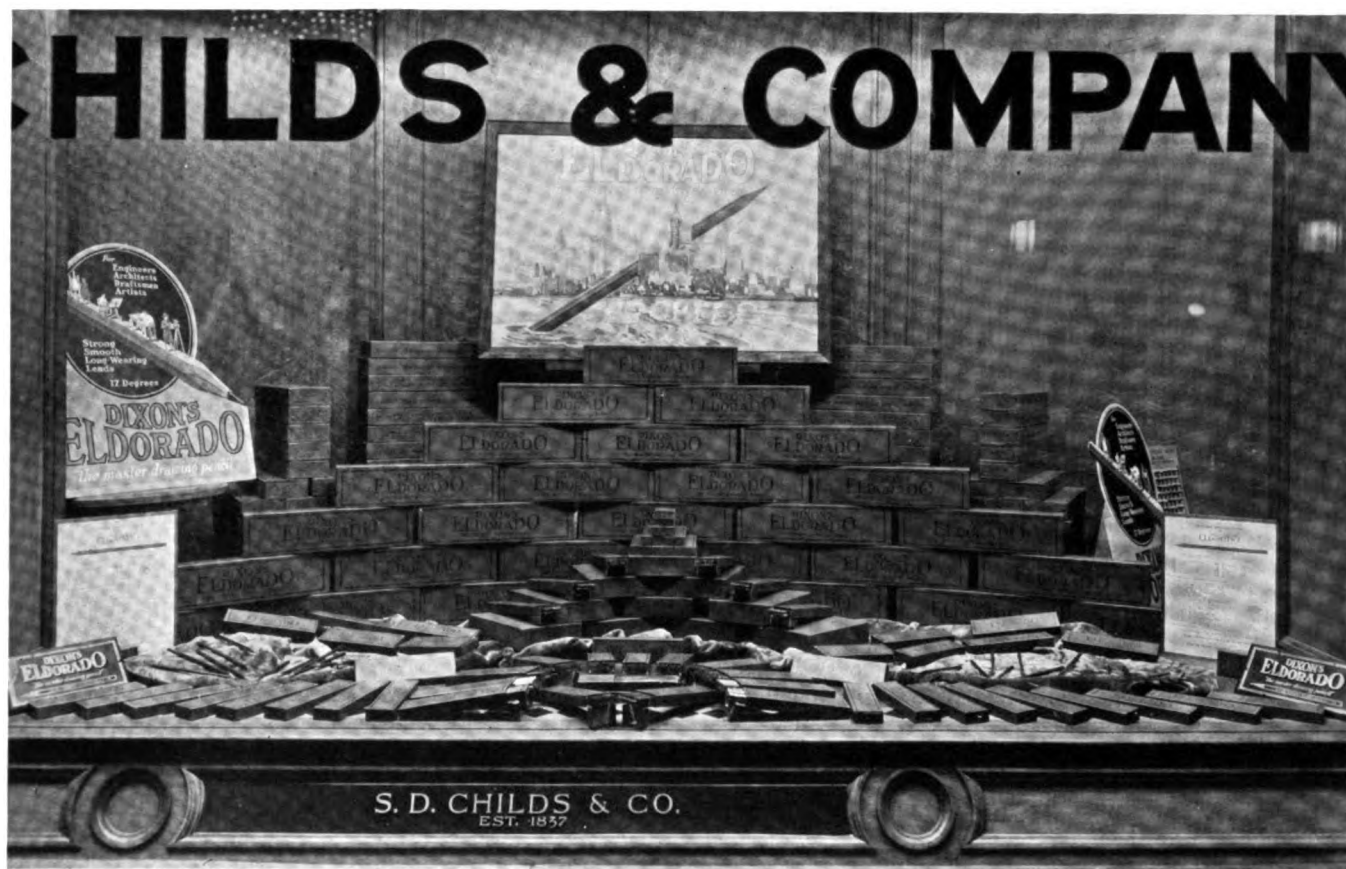
ANGELO VERTUCCI, Pencil Factory.

R. B. VINCENT, Gas Defense Division, Philadelphia Dis-
trict Office.

WM. J. WARD, 113th Infantry, Crucible Factory.

THOMAS WILSON, 47th Battalion, United States Guards,
Brass Factory.

DAVID YOUNG, Ordnance Department, Cost Department.



An ELDORADO Window of Distinction

IT goes without saying that every one who glanced into the window of S. D. Childs & Co., Chicago, the first week of this month, when the above display was presented, had the name ELDORADO impressed on his mind.

It is equally certain that a good many of those who stopped were attracted by the Selling Guide shown at either side of the window, and learned from this chart that ELDORADO was the one pencil to ease and quicken *their* pencil work.

These two objects—impressing a principal thought on the mind of the man who merely glances in a window as he passes by, and getting over a more detailed story to the man who stops and looks into a window—are uppermost in the minds of window dressers, but it is not every window artist or every set of display material that so clearly illustrates the carrying out of this principle.

On the side of artistic merit the nicely graduated curved series of dozen boxes, cartons and mammoth boxes is decidedly worthy of note, as is the presentation in an “artfully artless” way of the single ELDORADO pencils on their bed of velvet.

This enterprising Chicago house is to be congratulated on a very attractive and practical window.

◆ ◆ ◆

LOVE may make the world go round, but 'tis shove—otherwise known as push, ambition or initiative—that keeps it going forward.—*McClary's Wireless*.

PROFIT without pleasure also in the work that produces it, is like what we might suppose apples would be to us, were they not preceded by the glory of the blossoms.

McClary's Wireless.

Steeple of Old Boston Landmark

PARK Street Church, Boston, is located at the corner of Park and Tremont Streets, and as an old landmark has identified this street intersection for years as “Brimstone Corner.” Architecturally, the tower of this church is held to be very fine in design. It is graceful and beautiful from every point of view.

The sketch seen on the cover of this issue of GRAPHITE shows the church steeple. It was made by Mr. Walter M. Campbell, a prominent architectural illustrator of Boston, who specializes in drawings of this character for architects who could not attempt it in their own offices. A subject like the one in this sketch makes a strong appeal to Mr. Campbell, and it is with such subjects that he does his best work.

Mr. Campbell is an advocate of the pencil as an art medium. His success with it is convincing as a demonstration of the artistic merit and attractiveness of pencil sketches. The pencil in the hands of an artist makes its own peculiar demands in the way of technique; and lead-pencil sketches have an “atmosphere” all their own. At the same time it is true that the artist can be as direct as he pleases in his work with the pencil. He can draw lines “hard as steel” with it. And he can be as “suggestive” in his drawing, relying on soft, misty effects, as he may choose.

Mr. Campbell had been using Dixon's ELDORADO—“the master drawing pencil” for a year before he made this sketch. In that time he found the ELDORADO to meet all the exacting requirements of the architect and artist doing work of this excellence.

◆ ◆ ◆

DISCONTENT is the self-starter of progress.—*McClary's Wireless*.



**Tank Car, Gulf Refining Co.,
Port Arthur, Texas**

THIS concern uses Dixon's Silica-Graphite Paint on its tank cars. A service like this calls for a protective paint of highest quality, unquestioned reliability and adaptability to many severe conditions, such as wear, smoke, heat, attrition of cinders, dust, ballast, etc.

Dixon's Silica-Graphite Paint is the "old reliable" when called upon for such qualities, and its wide use by tank car companies is proof indisputable and sufficient. Do not be won by claims and price-cutting. Get the paint that the people use who have had experience and who know.

Favorite Dixon Pencils Back in Line

FOR the benefit of the trade who have not, up to this time, received complete advice, we list below the Dixon pencils that have been, within the last few weeks, put back on the market:

ANGLO-SAXON—Hexagon, No. 1802 Line, Nos. 1, 2, 3 and 4 Degrees; Dark Green Finish, Red Rubber Tips; ½ Gross to a Box.

ANGLO-SAXON—Round, No. 1810 Line, Nos. 1, 2, 3 and 4 Degrees; Dark Green Finish, Red Rubber Tips; ½ Gross to a Box.

METROPOLITAN—Round, No. 968 Line, Nos. 1, 2, 3 and 4 Degrees; Cedar Finish; ½ Gross to a Box.

DUPLIGRAPH COPYING—No. 2070, Hard, Yellow Finish, with Gilt Mouthpiece; 1 Dozen to Box, 6 Boxes to Carton. No. 2071, Soft, Lavender Finish, with Gilt Mouthpiece; 1 Dozen to Box, 6 Boxes to Carton.

STENOGRAPHERS'—Round, Tablet Size, No. 489½ Line, Cedar Finish, with Point Protector; Three Hardnesses, 6 to Box, 12 Boxes to Carton.

LUMBER CRAYON HOLDER—No. 503; 1 Dozen to Box, 3 Boxes to Carton.

POCKET PEN AND PENCIL CASE—No. 591, Gilt Finish; 1 Dozen on Card, 6 Cards to Carton.

CABINET—Round, No. 745 Line, Maroon Finish, in Patented ½ Gross Display Boxes.

CABINET—Hexagon, No. 747 Line, Maroon Finish, in Patented ½ Gross Display Boxes.

YELLOW ASTER—No. 403, Hexagon Shape, Packed in ½ Gross Boxes.

SEQUOIA—Round, No. 1277 (No. 2 Lead), and No. 1279 (No. 3 Lead); Yellow Finish, Packed ½ Gross to Box.



**ELDORADO Test Pad for
Counter Display**

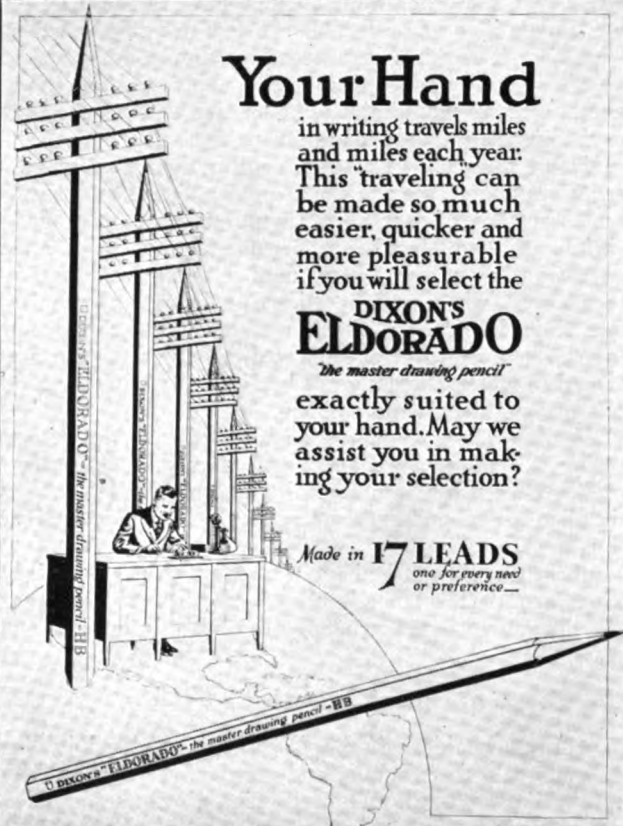
THE illustration shows a new device, modelled along the lines of the familiar telephone pad with attached pencil, put out by the Dixon Company for the benefit of the ELDORADO trade.

The device itself consists of a metal upright representing a pencil and lithographed in true colors, with metal base and pad, and an HB ELDORADO pencil attached. Its service to the dealer is at once apparent when it is considered how many more sales of a desirable item would be made if the customer only had some handy way of trying it without asking the dealer specially to show the article.

For example, every one who comes into the ELDORADO dealer's store and is at all interested in pencils,—and most of us are,—will be strongly tempted to pick up this HB ELDORADO pencil and run it across the pad, to see if ELDORADO really is the pencil "for easy, quick writing," as is set forth in the legend on the pad. In other words, it is a silent salesman of the ELDORADO pencil, occupying small space on the counter, and making it easy for the customer to introduce the subject of ELDORADO pencils to the dealer, instead of the other way about. To the dealer in stationery or art supplies with a heavy list of individual items this idea of helping him out on the introductory end is sure to meet with a sincere welcome.

The upright is 10½ inches high, handsomely colored in the rich hue of the ELDORADO, with gold lettering and the pencil point in black. The base measures 5½ × 4½ inches, with a groove at the end in which is laid a full length HB ELDORADO pencil, attached by a long fine chain.

Dealers carrying a stock of the ELDORADO can obtain one of these practical sales-builders by addressing the Pencil Department, Joseph Dixon Crucible Company, Jersey City, N. J., and asking for the ELDORADO test pad and pencil.




Your Hand
in writing travels miles
and miles each year.
This traveling can
be made so much
easier, quicker and
more pleasurable
if you will select the
**DIXON'S
ELDORADO**
"the master drawing pencil"
exactly suited to
your hand. May we
assist you in mak-
ing your selection?

Made in **17 LEADS**
one for every need
or preference—

Snappy ELDORADO Window Cards

THE Dixon Company, trying to make clear in a graphic way the assistance the ELDORADO pencil gives in pencil work, and the ease with which writing, drawing and figuring are accomplished with this pencil, has prepared two new display cards, which are illustrated here.

Both are presented in the attractive buff and blue ELDORADO colors, size $15\frac{1}{2} \times 11$ inches. Through its illustration of telegraph wires encircling the globe one suggests "the mileage" the arm travels in tracing letters, figures and other pencil work day after day, week after week, and month after month. For example, it is estimated that the average pencil worker's hand travels 500 miles in the course




INVENTIONS

that save labor
for the business
man —

**DIXON'S
ELDORADO**
"the master drawing pencil"

The fine texture
leads in the Eldorado Pencil ease
and quicken work
and save labor. We
will gladly help
you select the
Eldorado lead
exactly suited to
your hand.

Made in **17 LEADS**
one for every need
or preference—



of a year. To make that traveling easier—and to enable him to travel farther—can be safely left to the ELDORADO pencil.

The story of the second card is caught at a glance. The card is labelled "INVENTIONS" and shows Dixon's ELDORADO pencil in company with other modern labor-saving devices. This will present more forcefully than would many words the help in conservation of effort that ELDORADO affords the user.

These cards may be had by all dealers by addressing the Joseph Dixon Crucible Company, Jersey City, Pencil Department, and asking for "Telegraph Wire" and "Inventions" window cards.

New Quarters for Philadelphia Sales Office

WE wish to announce the removal of our Philadelphia Sales Office from 1020 Arch Street to Rooms 801 and 802 of the Finance Building, South Pennsylvania Square, opposite City Hall, Philadelphia, Pa., May 1st, 1919.

The Philadelphia Sales District comprises Pennsylvania, Southern New Jersey, Delaware, Maryland, District of Columbia, Virginia and West Virginia.

The Philadelphia office was started in 1881 at No. 6 North 5th Street, with C. W. Brown as manager. Shortly after it was moved to 40 North 4th Street and Mr. W. J. Coane was made manager in 1890 upon the retirement of Mr. C. W. Brown.

At the end of five years, the rapid development and expansion necessitated another change to 38 North 4th Street. History repeated itself and in 1898 the Philadelphia branch was moved to 1020 Arch Street with larger quarters, where it has been for the last twenty-one years.


In the earlier days at North 4th Street only a force of

four was required to handle the business, which then comprised Stove Polish, Crucibles, Pencils, Axle Grease, Machine Grease, Lubricating Graphite, Foundry Facings, Silica-Graphite Paint, and Traction Belt Dressing. From this small force this office grew to what it is to-day and gradually more products were added to the line, such as Solid Belt Dressing, Graphite Electrical Brushes, Automobile Lubricants and many others, all well known and extensively used.

The removal of the Philadelphia office from a store to an office building is also a change in policy, but as the trade in the Philadelphia District carry large and desirable stocks of Dixon's Pencils and Graphite Products, a still greater dependence will be placed on them in the future.

The Dixon Sales organization in Philadelphia, under the able management of Mr. W. G. Stringer, who entered the employ of the Dixon Company in 1898 and who succeeded Mr. W. J. Coane as the Philadelphia District Sales Representative in 1912, is prepared at all times to be at the service of the trade.

An Expert Opinion of
DIXON'S ELDORADO
"the master drawing pencil"



THE SOCIETY OF ILLUSTRATORS
OFFICE OF THE SECRETARY
ONE BROADWAY
NEW YORK

June 14, 1919

This is to certify that
you are the excellent quality
of your Eldorado master drawing
pencils which I find better
adapted to my use than
any other I have tried.

Very truly yours,
Howard Chandler Christy
Artist and Author
No. 106 67 St. East

17 ELDORADO leads — for all uses

Famous Artist's Letter for Window Display

WHEN Howard Chandler Christy, the great illustrator, says that he has found Dixon's ELDORADO — "the master drawing pencil," "better adapted to my use than any other I have tried," it seems well worth presenting this statement in facsimile form to the general public through the dealer's window.

Accordingly, we have mounted his letter, enlarged, on a dark blue cardboard mount measuring 17 × 14 inches, with easel attached for ready use.

In conjunction with the other ELDORADO advertising pieces the Christy card will be influential with the large class of customers who buy the pencil for technical use,—artists, architects, engineers, draftsmen and scientific workers.

The letter itself is on buff paper giving the appearance of a huge letterhead. The color scheme of the card is the standard ELDORADO "gold and blue" which lends itself well to window display.

Dealers desiring this card, please address the Joseph Dixon Crucible Co., Pencil Department, specifying "Christy card," and the window piece will be promptly forwarded.

Grease

ORDINARY commercial lubricating greases are oils held in a more or less solidified form by means of a dense fatty substance, and they range in consistency all the way from that of hard tallow to soft butter, depending upon the amount of mineral lubricating oil incorporated during their manufacture.

In general, the advantages of grease over oil are cleanliness, economy and reliability. Of course each has fields of

service that the other cannot enter, but for ordinary purposes grease is to be preferred. It does not drip and create a fire risk, it requires less attention, supply ducts are less liable to become clogged, it is easy to apply, and there is less waste. Greases should always be selected that have the lowest viscosity permissible for the work to be done.

Dixon's Graphite Greases are softer than corresponding grades of plain grease and therefore combine the advantages of oil with those of grease. We manufacture many grades, so it is important to select the proper one for each requirement.

Heavy, slow moving parts need a grease that will not squeeze out, whereas light, high speed bearings require a more fluid lubricant. Then, too, one must consider the range of temperatures encountered, whether the parts are exposed to water, the design of bearings and all other conditions that may affect the problem.

Dixon's Greases contain various grades of graphite according to requirements, and in all cases the percentage of graphite needed has been carefully determined. No one can mix plain grease and graphite and anywhere near approach a Dixon Grease.

Lubrication cannot be bought at so much per pound, but rather on a performance basis. A careful test will invariably demonstrate the economy of Dixon's over cheaper grease.

Annual Meeting, 1919

THE stockholders of the Joseph Dixon Crucible Company held their annual and regular meetings on Monday, April 21st, 1919. The following directors and officers were elected:

DIRECTORS

GEORGE T. SMITH	GEORGE E. LONG
WILLIAM G. BUMSTED	EDWARD L. YOUNG
J. H. SCHERMERHORN	HARRY DAILEY
ROBERT E. JENNINGS	

OFFICERS

GEORGE T. SMITH, *President*
 GEORGE E. LONG, *Vice-President*
 J. H. SCHERMERHORN, *Vice-President*
 HARRY DAILEY, *Secretary*
 WILLIAM KOESTER, *Treasurer*
 ALBERT NORRIS, *Asst. Secretary and Asst. Treasurer*

Of the 20,000 shares of stock 19,512 were voted. Undoubtedly a greater number would have been voted had it not been that a number of shares are held by estates, the executors of which do not feel at liberty to vote in an election.

The report made by President Smith and the remarks made by him on the business of the Company were received by the large number of stockholders present as most satisfactory and pleasing in every way.

The American Graphite Company, incorporated under the laws of the State of New York, is a subsidiary of the Joseph Dixon Crucible Company, and its annual election was held on the same day as that of the Joseph Dixon Crucible Company, and resulted in the election of the following officers:

GEORGE T. SMITH, *President*
 GEORGE E. LONG, *Vice-President*
 J. H. SCHERMERHORN, *Treasurer*
 HARRY DAILEY, *Secretary*
 WILLIAM KOESTER, *Asst. Secretary and Asst. Treasurer*

The directorate is the same as that of the Joseph Dixon Crucible Company.



The Crucible Department of the Dixon Co. Give a Dinner and Dance

In Honor of the Soldiers Who Have Returned to Resume
Their Business Duties

THE monotony of business activity was delightfully broken when the final return of three members of the Dixon force afforded an opportunity for a welcome festival.

First Lieutenant of Infantry Harold Callanan, Regimental Sergeant-Major Harry Armstrong, and Corporal of Engineers William MacFadden, all connected with the Crucible Department, were the guests of honor at a dinner and dance given by their department.

Eighty-two invitations were accepted, and at six o'clock two Fifth Avenue 'buses, chartered for the occasion, conveyed the happy party to the Clarendon Restaurant, Broadway and 136th Street.

The menu card was of special design, drawn by the clever New York artist, Mr. Grant Wright, printed in brown and afterwards embellished in colors by the artist. A reduction of the title-page is shown with this article.

Vice-President Long was to have been toastmaster, but

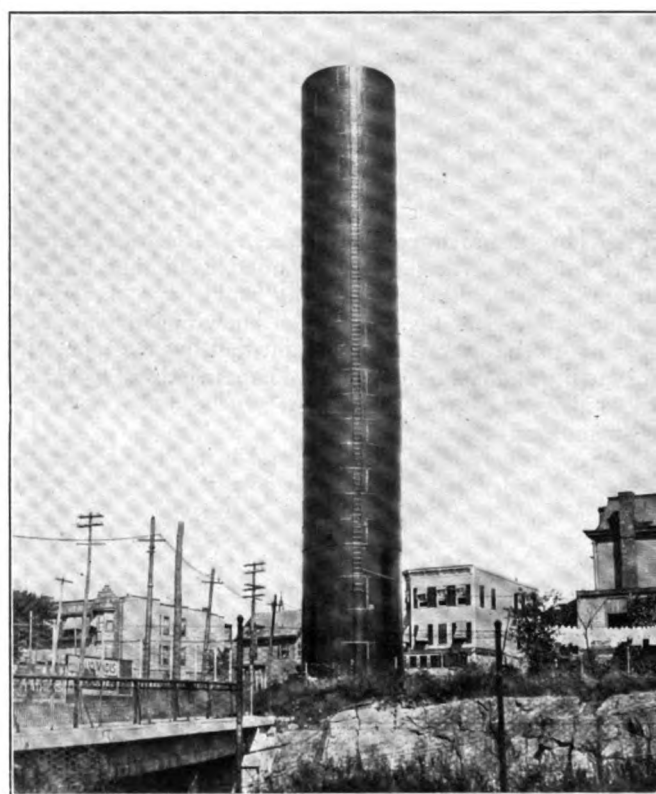
was unavoidably absent on Dixon business. So Mr. A. L. Haasis, under whose management the whole affair was arranged, started the evening with the presentation of laurel wreaths to the three soldier guests, the wreath of Sergeant-Major Armstrong being finished in gold, in honor of his record on battle-fields.

Mr. John M. Ready, manager of the New York branch, just returned from a California pleasure trip, was greeted with enthusiasm by his Dixon friends and associates.

In the elimination dance, conducted by Mr. J. Kip Edwards, the prize bouquet was awarded to Miss Gibson of the Credit Department.

'Buses had been chartered for eleven o'clock, and it took all the persuasive powers of Manager Haasis to influence the party to break up the pleasures of the evening and assemble for the return.

The whole affair was a success from every point of view.



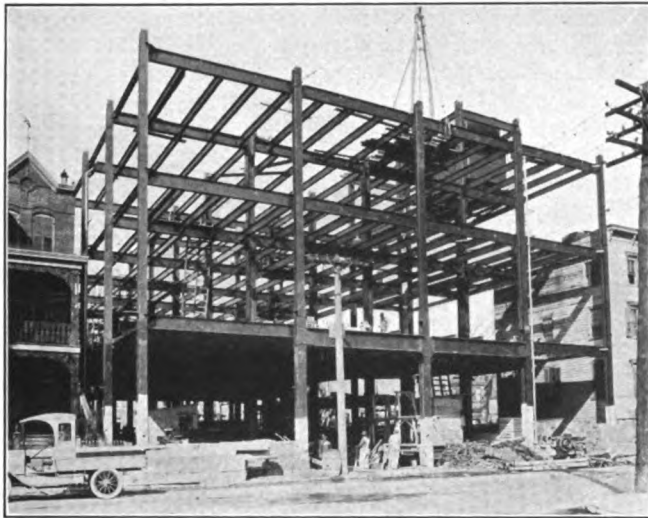
Standpipe, New York Interurban Water Co., Mt. Vernon, N. Y.

THE structure illustrated above is painted with Dixon's Silica-Graphite Paint. Mr. Joseph V. Siler, contracting painter of Philadelphia, was the contracting painter. The standpipe is 25' x 125'. It was given two coats of Dixon's Paint. Dixon's was used by the owners because it LASTS LONGER and saves in labor and material.

Beware of a paint whose chief recommendation is that it costs a few cents less a gallon. It may give several years less service on the job.

◆ ◆ ◆

THE only people who die and leave one money, are those he doesn't want to have die at any price.—McClary's Wireless.



New Automatic Telephone Exchange Building, Norfolk, Virginia

McKenzie, Voorhees & Gmelin, Architects; Bethlehem Steel Company, Fabricators; Eidlitz & Ross, Inc., General Contractors. 600 tons of steel used. Both shop and field coats, Dixon's Silica-Graphite Paint

WHY do architects, engineers, fabricators, contractors and owners of so many notable buildings use Dixon's Silica-Graphite Paint? They could get a cheaper per gallon paint. But the people who know and the buildings that are to endure call for the paint that has the reputation for quality and endurance. You do not match cheap harness on a high-grade horse. You do not put cheap tires on a first-class automobile. All is balanced.

Dixon's Silica-Graphite Paint is made in **FIRST QUALITY** only and lasts longer. That is why architects, owners and engineers specify it.

Resistance Units

ELECTRICAL resistance, measured in ohms, is the opposite of conductivity. All electrical circuits have a certain amount of loss due to the natural resistance of the parts, but it often happens that resistance is purposely inserted in a circuit. The filament in an incandescent lamp is nothing more than a resistance unit that becomes hot and glows. In an electric iron advantage is taken of the heat produced by placing resistance in an electric circuit.

Such examples are almost without number, but you will observe that when resistance is used to generate heat or light, it is nearly always made of metal, such as German silver wire, or some patented metallic substance. Dixon's Graphite Resistance Units can be used only when the current is very weak, or when the flow is of short duration. Graphite Rods are satisfactory for lightning arrestors, variable resistance rheostats for wireless telegraph outfits, in electric clocks and musical instruments, and in numerous other devices that operate on a high voltage and low current. They are so much cheaper and so much smaller than other resistance units that we have been able to build up a valuable business on this item alone.

Resistance can be anything up to 1,000,000 ohms, and size can be anything up to 1" dia. by 12" long. Rods of large diameter cannot be made to have as much resistance as the smaller sizes because resistance varies almost inversely as the diameter.

Dixon's Foundry Facings

Purpose of Facing:—Foundry facings are applied to the surface of molds for the purpose of preventing adhesion between the metal and the sand of which the mold is composed. When the facing performs this function properly, a casting is secured which requires little or no cleaning, thus effecting a great saving in the operating expenses.

The saving is not confined to the item of cleaning, but also appears in the reduced cost of machining due to the absence of burnt sand on the surface of the casting. When facings of the better quality are used, the castings are of that fine bluish gray color so much desired by the progressive foundryman.

The reason why a graphite or "silver lead" facing prevents the sand adhering to the metal is as follows:

Graphite is one of the forms of carbon and is a combustible material. When molten metal is poured into the mold, the air in the mold and the air carried in by the stream of melted metal furnish oxygen enough to bring about a certain amount of combustion, forming a gas between the metal and the mold. This effectually prevents adhesion of the metal to the sand, and just as long as the gas film exists no adhesion can possibly occur.

Pure graphite will not adhere of itself to the mold surfaces, but will run before the metal the moment the sand dries. To prevent this, it is necessary to add a binder to hold it in place. The proper proportioning and selection of this binder is a matter of the utmost importance. Facings with a large percentage of binder are more difficult to "slick" than those with a low percentage. Therefore they are indicated where the sand is used quite dry. It is common experience that facings used during the summer months with the utmost satisfaction, are found fault with when winter months come, because they don't "slick" well. This is most often experienced in foundries which are not well heated and which become unusually damp in cold weather. The sand does not dry out so rapidly as in the summer, and is consequently just a little damper when used. This accounts for a difference in the working of the facing.

Kinds of Molding:—There are four general classes of work that require different treatment, viz.: Green Sand Molding, Loam Molding, Dry Sand and Core Work.

Green sand molding is by far the most common, and is used for nearly all iron molding done in flasks. "Green sand" means damp sand that can be packed sufficiently hard to retain its shape. Facings are dusted on, and slicked by hand.

Dry sand molding differs from green sand in that after the mold is finished, the flasks are placed in a drying oven and thoroughly dried. Facing for dry sand is mixed with water and applied to the hard surfaces as a wash.

Core work. If the casting is to be hollow, a core of the proper form is suspended in the mold, so that after metal is poured the core can be knocked out and leave a hole of any desired shape within the casting. Cores are commonly made of flinty sand mixed with linseed oil or flour and baked hard. They are then coated with a graphite wash, the same as for dry sand work.

Loam molding, which is gradually being replaced by dry sand molding, differs from green sand work in that the molds proper are not contained in flasks or bedded in the floor, but are constructed in sections composed of plates, brickwork, etc., and lined with loam, which is a mixture of sand and clay. After molds have been built up, the loam is dried and washed with a mixture of charcoal and water.

(To be continued)

DIXON'S GRAPHITE Transmission and Differential LUBRICANT

Put it in your transmission and differential. A quicker, easier "pick up" is at once apparent. Hills don't seem as high. Gas doesn't cost so much per mile. Repair bills decrease. And riding comfort becomes far greater. It pays.

*Also ask your dealer about
Dixon's famous Cup Grease*

Write for Booklet No. 190-G

JOSEPH DIXON CRUCIBLE CO.



Jersey City, New Jersey
Established 1827



Dixon Service

BOSTON PUBLISHING COMPANY
171 TREMONT STREET
BOSTON, MASS.

April 22, 1919.

Joseph Dixon Crucible Co.,
Boston, Mass.

Gentlemen:

This is an acknowledgment of the courtesy and interest shown by one of the busy bees from your hive, when asked to get us out of trouble and make a sale at the same time.

In our rotogravure department we use a particular quality of graphite in very small quantities. After fruitless search and inquiry, we appealed over the telephone to the House of Dixon for assistance. The assistance was given; we were rescued from trouble; and writer takes pleasure in paying a gratuitous tribute to any organization that appreciates the immensity of the little things. It is this care and solicitous regard for the most trivial desire of a customer that makes the House of Dixon one of our best friends.

Very truly yours,

JEAN STIMMELL.

GOLDEN BOUQUETS

OR WHY

DIXON'S ELDORADO

"the master drawing pencil"

SHOULD BE USED

A Chief Engineer says:

"THE samples of ELDORADO pencils you sent me for trial have been received and tried out in our drafting room, with the result that we have adopted the ELDORADO for use in the *drafting rooms and accounting departments* of all our companies."

From Overseas:

"I AM very much satisfied with it and wish to have more pencils of Dixon's ELDORADO. I also told my friends about your excellent drawing pencil. My stationer is —."

A Civil Engineer writes:

"THE samples of pencils which you sent me are received. This grade of the ELDORADO pencils, after a trial, I find are what I want and are all you claim for them and *fully equal to the imported pencils.*"

From a Treasurer:

"I BEG to acknowledge with thanks the receipt of your three samples of pencils. Your ELDORADO is what I had in mind and shall have some ordered for our own stock and use. It does respond on any paper, is not scratchy, and for me is the *best pencil I have had the pleasure of using.*"

A Southern Architect says:

"THE ELDORADO samples sent us proved very satisfactory and we will be glad to purchase from your agents if there are any in town."

From a Consulting Engineer:

"THE ELDORADO pencils you sent me are very good indeed. My draftsmen compliment them."

A College Professor says:

"I RECEIVED samples of ELDORADO — 'the master drawing pencil' — and I find them to be as recommended, a *perfect pencil*, uniform and free from grit."

A Structural Iron Works Co. says:

"WE have just received samples of your ELDORADO drawing pencil, for which we thank you. We have heretofore used this make of pencil in our drafting room and found them quite satisfactory."

In the Accounting Field:

"THE samples of ELDORADO pencils you kindly sent me are very satisfactory. I do not only use them in my own work, but have recommended them to others. I buy my supplies from various stationers, all of whom happen to carry a full line of ELDORADO pencils."

An Engineer says:

"I BEG to thank you very much for the ELDORADO pencils which you were so kind to send me some time ago, and since that time I *have used no other make in my work.* The ELDORADO pencil is the smoothest and finest writing pencil that I have ever used."

A Shoe Manufacturer writes:

"ELDORADO pencils are all you claim."

A Druggist says:

"THE ELDORADO pencils reached me all right and I have used nothing else since. Have stocked several grades of the ELDORADO but have been unable to get the erasers. Will you send me a half gross through —? The ELDORADO is the *best and cheapest pencil* I have ever used, and I have been a crank about my pencils for years."

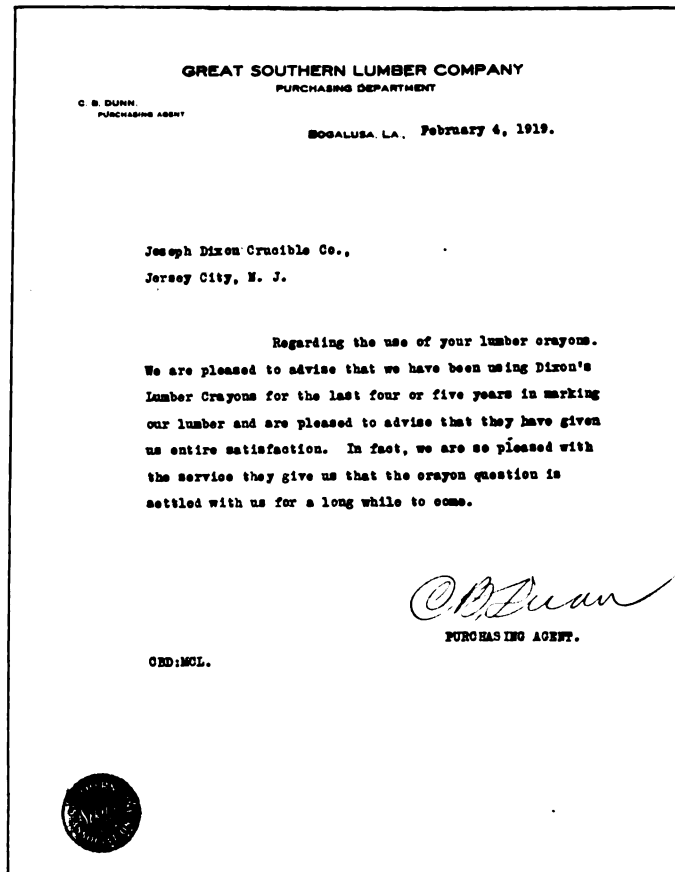
A Wholesale Grocer says:

"YOUR pencil samples received. They have the excellences you claim for them."

An Engineer says:

"THANK you for the samples. We bought one box H and one box 2H. They are the 'greatest ever.'"

A Great Lumber Company Endorses DIXON'S LUMBER CRAYONS



Dixon's Lumber Crayons are Unmatched for
Durability
Vividness of Marks
Permanency of Marks

Crayons that mark sharply and clearly and yet wear away slowly.

Crayons whose markings, exposed to the weather, retain their original vivid color for months—even years.

For marking steel, stone, concrete, brick, railway cars, rough textiles, shipping cases—anything for which a bold marking agent is required, including lumber in all stages of preparation.

A full-size sample will be gladly sent you on request. Mention your dealer and the kind of material you wish to mark so that we may intelligently select the sample to send you. Address correspondence about Dixon's Lumber Crayons to Dept. 190-J.

Made in Jersey City, N. J., by the

Joseph Dixon Crucible Company

Established 1827



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Graphite

PUBLISHED BY THE
JOSEPH DIXON CRUCIBLE COMPANY,

JERSEY CITY, N. J.

VOL. XXI

JULY, 1919

No. 7



JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED 1827 Jersey City, N. J., U. S. A. INCORPORATED 1868

**Miners, Importers and
Manufacturers of Graphite,
Plumbago, Black Lead**

DIRECTORS

GEORGE T. SMITH GEORGE E. LONG
WILLIAM G. BUMSTED EDWARD L. YOUNG
J. H. SCHERMERHORN HARRY DAILEY
ROBT. E. JENNINGS

OFFICERS

GEORGE T. SMITH *President*
GEORGE E. LONG *Vice-President*
J. H. SCHERMERHORN *Vice-President*
HARRY DAILEY *Secretary*
WILLIAM KOESTER *Treasurer*
ALBERT NORRIS *Ass't Sec'y & Ass't Treas.*

PURCHASING AGENT

JOHN I. McCOMB

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SAN FRANCISCO SALESROOM . . 155 Second Street
CHICAGO OFFICE . 1323 to 1327 Monadnock Block
BOSTON OFFICE . . 347 John Hancock Building
ST. LOUIS OFFICE . . . 501 Victoria Building
BUFFALO OFFICE, 409 Erie County Savings Bank Bldg.
ATLANTA OFFICE 225 Peachtree Street

EUROPEAN AGENTS

Graphite Products, Ltd., 218-220 Queens Road, Battersea, London

SOUTH AMERICAN AGENTS

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS

ALFREDO J. EICHLER, *General Agent*

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E. H. Blanchard, 185 Paseo Colon, Buenos Aires

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Enrique Seller, Calle Huerfanos 761, Santiago, Chile

Agent for Brasil

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FOR DIXON'S AMERICAN GRAPHITE PENCILS, ETC.

National Paper and Type Company, 31-35 Burling Slip, N. Y.

*With Branch Houses in Mexico, Cuba, Peru, Argentine,
Uruguay, Venezuela, Porto Rico and Colombia*

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A. R. MacDougall & Co., Ltd., 468 King St., West, Toronto, Ontario, Can.

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS
Canadian Asbestos Company, Montreal, Quebec, Can.



Whatever your profession or business—artist, architect, accountant, clerk, draftsman, engineer, executive, salesman, stenographer, student, teacher, writer—the ELDORADO will *ease* and *quicken* your work. Long wearing, delightfully smooth leads made in 17 perfect degrees.

6B (softest) to 9H (hardest), HB (medium) for general use.

Get a trial dozen from your dealer, or send 10c for a full-length pencil, mentioning dealer's name and whether very soft, soft, medium, hard or very hard lead is desired.

JOSEPH DIXON CRUCIBLE CO.

Established 1827



Dept. 190-J

Jersey City, N. J.

Canadian distributors

A. R. MacDougall & Company, Ltd., Toronto, Ont.

*There is a Dixon-quality pencil, crayon, and eraser
for every purpose*



WHEN you consider that it takes five weeks to make crucibles and another thirty days

Of Interest to the Brass Foundries

By **H. C. SORENSON**
of the Chicago District Sales Office

We shall continue to improve our crucibles until we feel sure we have reached

before a fair-sized test is completed, you can appreciate what the crucible maker was up against in trying to find a substitute clay suitable for crucible making. During 1916 and 1917, when we were in the midst of our crucible troubles and the demand exceeded the supply on account of the quality of crucibles falling off 50 to 75%, there were several non-crucible furnaces installed—not because of their efficiency nor because they turned out a better grade of metal, but because crucibles were impossible to obtain in sufficient quantities.

Since that time, several crucible makers have increased their output and such a shortage will never exist again. Furthermore, the quality of crucibles is now practically as good as those furnished previous to the war; in fact, we have several customers who have gone on record telling us that our crucibles are better than before the war.

the height of perfection with American clays. We notice, as our quality increases and prices go down, that a good many foundries are returning to the crucible as a means of melting, which proves that the crucible is the ideal melter and not only turns out a better grade of metal but with less shrinkage and less copper oxide.

For those who want large capacity, we offer our tilting type of crucibles, which hold 750 pounds of metal or more. The life of these crucibles is longer because they are not handled with shanks and tongs, and on account of the fact that most of these furnaces use gas or oil fuel there are no ashes to clean or bother with. This type of crucible furnace requires no more fuel for melting, nor is there any more labor needed for operating it than is required with a non-crucible furnace of the same capacity. The advantages are: less shrinkage and a better grade of metal.

"A JOB FOR EVERY STAR"

THE boys are coming back, and in accordance with the promise made to them by President George T. Smith when they entered the United States Service, they are being assigned to a position at least as good as that which they left. The following have returned up to the present:

RALPH ALFONSO, *Depot Brigade, Color and Lead Department.*

B. C. AREY, *Field Artillery, Boston District Office.*

H. W. ARMSTRONG, *Regimental Sgt.-Major, 312th Infantry, A.E.F., Crucible Department.*

LOUIS ARNOLD, *113th Infantry, A.E.F., Driver.*

EDWARD E. BACKUS, *335th Field Artillery, Crucible Factory Office.*

FRED BIRK, *3rd Chemical Battalion, Laboratory.*

G. H. BOWLEY, *Naval Reserve, Pencil Department.*

GEO. E. BROWN, *113th Infantry, Crucible Factory.*

C. A. BRUNGER, *Ordnance Sergeant, A.E.F., Auto. Lub. Sales Department.*

WARREN BUDD, *S.A.T.C., Columbia University, Pencil Department.*

WILLIAM P. S. BURRELL, *Motor Transport Corps, Advertising Department.*

F. W. CASSEY, *Sergeant, 104th Field Signal Battalion, A.E.F., Accounting Department.*

JOHN CONKLIN, *113th Infantry, A.E.F., Driver.*

H. N. COONS, *Co. A, 53rd Infantry, A.E.F., Pencil Sales Department.*

H. A. CORDES, *20th Engineers, A.E.F., Crucible Factory.*

FRANK CYWINISKI, *5th Battalion, Aberdeen Proving Grounds, Crucible Factory.*

STEFEN DUBNOWSKI, *606th Engineers, Color and Lead Department.*

HARRY D. ERICKSON, *14th Engineers (Light Railway), Traffic Department.*

THOMAS EVANS, *16th Infantry Battalion, Pencil Factory.*

MICHAEL FALLON, *347th Regiment, A.E.F., Crucible Factory.*

JOHN FARGO, *334th Field Artillery, Pencil Factory.*

ANDREW FESTA, *Camp Humphreys, Color and Lead Department.*

JOSEPH GREEN, *18th Casual Aircraft Armor Company, Machinist.*

TONY GREY, *153rd Depot Brigade, U.S.A., Crucible Factory.*

WM. J. HAMILTON, *Sgt.-Major, Engineers' Corps, Credit Department.*

GEORGE HEATHER, *47th Infantry, Color and Lead Factory.*

H. L. HEWSON, *Lieut., U. S. Navy, Railroad Department.*

JOSEPH HUMMILL, *Ordnance Dept., Headquarters Co., Driver.*

WILLIAM KIRCHNER, *59th Pioneer Infantry, A.E.F., Color and Lead Department.*

ANTONIO LESMAN, *1st Gas Regiment, U.S.A., Crucible Factory.*

THOMAS A. McCRYSTAL, *U. S. Navy, Grease Factory.*

NORMAN McDONALD, *Royal Flying Corps, Brass Factory.*

WILLIAM MCFADDEN, *104th Engrs. Corps, Crucible Sales Department.*

J. J. MONAHAN, *Hdq. Co., 346th Infantry, Auto. Lub. Sales Department.*

THOMAS A. MOORE, *S.A. T.C., Fordham University, Cost Accounting Department.*

VINCENT PETRIE, *U. S. Navy, Cost Accounting Department.*

HARVEY RAGAN, *U. S. Navy, Lubricating Sales Department.*

ANDREW RODACK, *Aircraft Battery (67th), Color and Lead Department.*

JOHN O. ROLLINS, *U. S. Navy, Purchasing Department.*

EDWIN A. SELL, *Sergeant, 33rd Engineers, A.E.F., Pencil Sales Department.*

FRANK SPINELLO, *3rd Engrs.' Training Regiment, Driver.*

HENRY STEFFENS, *3rd Engrs.' Training Regiment, Cost Accounting Department.*

JOHN F. STIER, *336th Machine Gun Battalion, Pencil Factory.*

WILLIAM SULLIVAN, *347th Infantry, A.E.F., Color and Lead Department.*

A. K. SUTTON, *Machinists' Mate, Naval Aviation, Auto. Lub. Sales Department.*

ANGELO VERTUCCI, *Pencil Factory.*

R. B. VINCENT, *Gas Defense Division, Philadelphia District Office.*

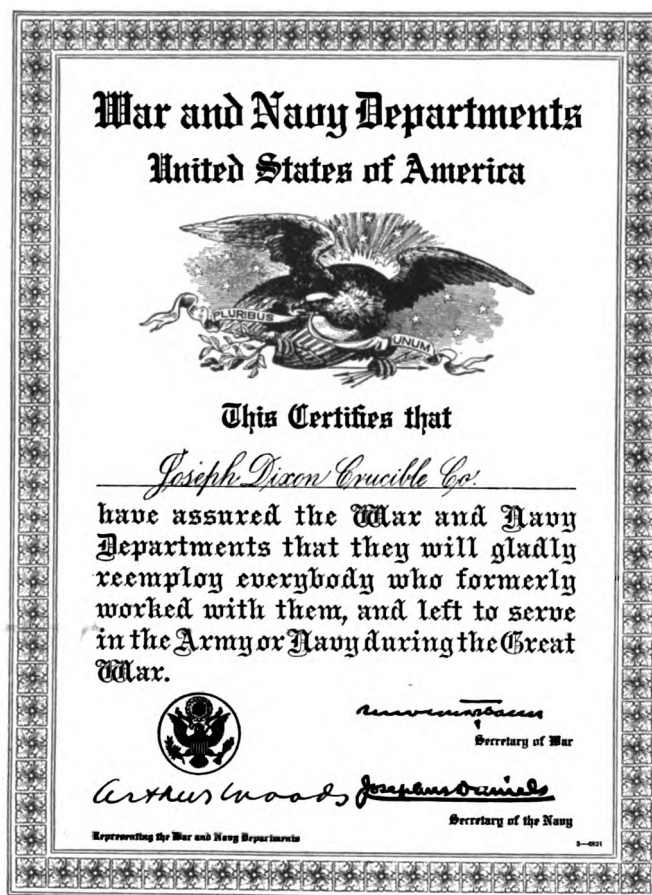
SAM VITALI, *158th Infantry, Pencil Factory.*

WM. J. WARD, *113th Infantry, Crucible Factory.*

JOSEPH WHITLEY, *113th Infantry, A.E.F., Cost Department.*

THOMAS WILSON, *47th Battalion, United States Guards, Brass Factory.*

DAVID YOUNG, *Ordnance Department, Cost Department.*



(Reproduction of original awarded by the War and Navy Departments)



Grimes-Stassforth Stationery Company

AS indicating the spirit of progress and the upward trend of business on the Pacific Coast within the past fifty years, we show on this page the building lately occupied by the Grimes-Stassforth Stationery Company of Los Angeles.


This company has made its name known for quality and reliability throughout Southern California and Arizona as handlers of filing devices, loose leaf equipment, general stationery, printing and engraving. They handle the Dixon line of pencils, crayons, erasers, penholders, etc., including the leader of that line: Dixon's ELDORADO—"the master drawing pencil."

Those at the head of the policies which have made this house well known are Mr. George W. Grimes, president; Mr. H. W. Stacy, vice-president, and Mr. F. E. Rising, secretary and treasurer.

The building shown is of a type that lends itself well to the requirements of a house of this character, and at the same time is thoroughly in keeping with the architecture of the section. Generous display space is a feature,

indicating that more and more the distributors of modern products incline to the reasoning that generous window space, properly handled, keeps merchandise moving.

Our best wishes to the Grimes-Stassforth Stationery Company in their new home.

CLASSES OF DOMESTIC SERVICE		WESTERN UNION		CLASSES OF CABLE SERVICE	
Telegram			Full Rate		
Night Message			Half Rate Deferred		
Day Letter			Cable Letter		
Night Letter			Week End Letter		
Charges (if any) \$			Charges (if any) \$		

BY TELEPHONE FROM THE WESTERN UNION MAIN OFFICE
NEWCOMB CARLTON, PRESIDENT GEORGE W. E. ATKINS, FIRST VICE-PRESIDENT

Dated 1919 May 19 PM 9 53
 To A4990 27 NL
 UNIONTOWN PENN 19
 JOSEPH DIXON CRUCIBLE CO 68 BRADY ST NEWYORK NY
 TOMMY MILTON IN DURENBERG SPECIAL WINS VICTORY SWEEPSTAKES
 EVENT HELD HERE TODAY USING DIXONS GRAPHITE LUBRICANTS
 THROUGHOUT LOUIS CHEVROLET SECOND RALPH MULFORD THIRD ALL
 USING DIXONS GREASE
 K F LEWIS



Fourteen Years' Paint Service

THE bridge over the Ohio River between East Liverpool, Ohio, and Newell, W. Va., is illustrated above.

The total length of the bridge is 1600 feet, and 105 feet above the river, with a suspended channel span of 700 feet.

The bridge engineer in charge was Mr. E. K. Morse, of Pittsburgh, Pa.

Fourteen years ago this bridge was painted with Dixon's Silica-Graphite Paint. We quote Mr. Morse's letter of June 4, 1919:

"In regard to the Newell Bridge, Newell, West Virginia, I am pleased to inform you that the bridge has not been painted since it was turned over to travel, July 4, 1905. The original paint (Dixon's Silica-Graphite Paint) is not only *still* protecting the bridge but is in fairly good condition. Taking into consideration the question of time, it is in elegant condition and has given wonderful service."

This is one of many similar records proving the "longer service" of this unequalled protective paint. Divide this service into the original cost for paint and labor, and you will see that, per year, no paint equals Dixon's Silica-Graphite Paint in yearly economy.

Advertising, talk, claims, etc.—they are as nothing if unsupported by service. Why is Dixon's Paint specified and insisted upon by those who have had the widest experience, by eminent engineers like Mr. Morse? We answer: Because of what it does invariably in service, as in this instance on the East Liverpool Bridge. With such a reputation, you can understand why Dixon's is the "paint badge of service," with railroads, industrial concerns, Government and other experts, who must have the best economy paint.

Specify and use none other under any circumstances. By the invariable quality of their paint and other graphite prod-

ucts, the Dixon Company will justify your confidence, a confidence and patronage which we have enjoyed from users for over fifty years.

Inspection Trip

MR. GEORGE T. SMITH, president of the Joseph Dixon Crucible Company, together with his directors, has lately made an inspection of the properties of the American Graphite Company.

The American Graphite Company is owned by the Joseph Dixon Crucible Company and comprises several thousand acres of graphite and wood lands, a large graphite mine extending nearly a mile in length and some 300 feet underground, also a large reducing mill as well as a large refining mill located at Ticonderoga, N. Y.

In addition to the mines and mills, the company owns dock property and storage property on Lake George, together with steam tugs and scows used in the transportation of coal and graphite.

Each year President Smith and his directors make a trip of inspection, going carefully over all the properties, considering what can be done in the way of improvements for the benefit of the company and its employees.

Located at the mines, there are, besides the mill building, warehouses, stores and boarding-houses, a large number of company-owned houses which are used by the company's employees.

President Smith has taken a keen personal interest in the welfare of all of the workers and has been especially careful in supplying everything conducive to their health.

A year or so ago, a cement reservoir was built that the people in the camp might be assured of pure, cool drinking-water. This water is piped to the various houses, which are also supplied with electric current for lighting purposes.

For amusement, a large corrugated iron building was erected wherein are held dances, meetings and each week

there is given one or more motion picture shows for the benefit of the workers.

There is also a district school and teacher furnished by the State.

Dixon's Foundry Facings (*continued*)

Good Facings Desirable:—Good castings depend largely upon good facings, or at least good castings are impossible with poor facings. On the other hand, it is necessary that the facing be available at a reasonable cost consistent with quality. Dixon's Foundry Facings meet this requirement and have been adopted in many foundries after a careful test alongside of facings whose first cost was considerably less, as it was unquestionably demonstrated that the cheaper priced facings were much more expensive.

The following data illustrate what we mean. In this test approximately 20 square feet of the mold were covered with each grade of facing, which accounts for the different weights.

Number	Weight used	Area covered Square feet	Lbs. used per 100 square feet
0322	10½ oz.	19½	3.36
6726	11½ oz.	19½	3.685
2441	7 oz.	19½	2.24
604	7 oz.	20	2.19

Number	Cost per pound	Cost per 100 sq. feet	Finish of mold	Finish of casting
0322	4½c.	15c.	Poor	Poor
6726	6c.	22c.	Good	Good
2441	7c.	16c.	Good	Very good
604	7c.	15c.	Fair	Good

In this particular test, which was made on a large planer casting, No. 2441 shows up the best, and, naturally, this would be so, as No. 2441 is intended for heavy work. In the comparison of No. 0322 and No. 6726 the extra cost of the facing is more than made up by the finish of the casting, as the labor in cleaning a casting which has been faced with No. 0322 would be considerably higher than the extra cost of using No. 6726, which is only 22c. for 100 square feet.

This test has been made a great many times and it is the best argument for good facings that it is possible to get, as it proves conclusively that the most economical facing is the high grade lead, for it will cover a greater area per pound and give a better finish to the mold and the casting at a less cost than a cheap loaded facing. Another convincing test is to use a good Dixon lead on half of a mold and a competitive grade on the other half, and then compare results after the casting is made.

"Cleanliness is Next to Godliness"

THE CENTRAL STATION recalls this age-old proverb to our minds and adds that we moderns know that cleanliness is also next to efficiency—is, indeed, part and parcel of the latter quality. Nowhere is this truer than in the operation of a steam boiler.

Heat is transmitted to the water within the boiler by three processes: radiation, convection and conduction. Radiation originates in the fuel bed and hot furnace walls, convection in the hot traveling gases, and conduction is a function of the metal of the boiler.

Heat has to penetrate five layers of interfering substances, namely: a film of dry, stagnant gas, a layer of soot, the

metal of the tube, a layer of scale and a film of dry steam.

The Central Station for March has a most excellent and interesting article entitled "Principles of Heat Absorption," which tells us that the formation of scale should be absolutely prevented. When it does occur, it should be removed as rapidly as it forms, by scale cutters, or "tube cutters" as they are called. The loss in conductivity, due to the presence of scale, has never been reduced to a rule or formula, depending upon the thickness, or the degree of hardness or the chemical composition of the scale. The percentages of loss can be determined in each case only by actual tests.

The Central Station gives a table, showing the results of a number of tests of loss due to scale, made at the University of Illinois.

Some twenty-five years ago, the Dixon Company became interested in some reports made by engineers who had made use of flake graphite for the prevention of hard scale in boilers. Through the happy thought of some one engineer, an experiment was made with the result that it was found that when Dixon's Flake Graphite was introduced into a boiler it would not act as a purifier of the water, nor would it act as a preventive of the deposit of scale-forming material, but it would prevent the formation of hard scale and, indeed, to a large degree prevented the formation of any of the solids into a hard substance. In fact, it kept the solids in such a soft condition that they were easily disposed of in the blowing out of the boiler.

When this subject came up for discussion before engineers of authority it was verified by many engineers, and then it was that Flake Graphite came into use generally for boilers.

Hints About Dixon's Graphite Brushes

CARE should be taken that graphite brushes fit the commutator accurately, otherwise sparking will occur and pit the surface of the brush. The following hints should be carefully observed in every case.

First. When placing new brushes on a machine they should be fitted accurately to the commutator by means of the finest sandpaper. Many new brushes are burned because of improper contact, which causes the whole current to flow through a small area at the heel or toe of the brush.

Second. Sandpaper the contact surfaces and commutator occasionally, as the bearing surfaces of the brushes will take on a high glaze in time and may cause squealing. Let last stroke of sandpaper be in direction of rotation, if machine only turns one way. Use a strip of sandpaper a little wider than brush.

Third. It is absolutely essential that the mica strips be not higher than the copper bars, for Dixon's Graphite Brushes are not a grinding brush and will not grind the mica down.

Fourth. For best results, the spring tension should be low and generally not more than three pounds for any size brush. For low speed machines it may be less.

Fifth. The commutator must be free from all dirt or oil.

Sixth. Don't soak Dixon's Graphite Brushes in oil or grease.

Seventh. Sometimes, where neither carbon nor graphite brushes alone give fully satisfactory service, a combination of the two proves advantageous. Put Dixon's Brushes on the negative studs of motors, and on the positive studs of generators.

Eighth. Brushes must fit their holders snugly or there will be vibration and consequent sparking between brushes and holders. This burns the brush and weakens it mechanically.



Dixon's VICTORY Assortment No. 434

NOVELTY, attractiveness, convenience: these are the qualities that stand out in Dixon's VICTORY assortment No. 434. Its sales are going, going,—faster and faster. It is a great assortment for the jobbing trade and we are prepared to handle a large volume of orders for it "on the dot."

Neither the pencils nor the box containing them, however, are shown to the best advantage in this black and white illustration.

For the pencils in the VICTORY assortment are all finished in attractive colors—green, yellow and mottled: "Ticonderoga" and "Anglo Saxon" mainly. The pencils are in two shapes, round and hexagon. And there are two kinds of red eraser tips,—the standard tip, and the pat-

ented wedge eraser No. 450. The use of this wedge tip is a decided novelty in an assortment box, which adds to the attractiveness of the VICTORY, and to its effectiveness as a rapid-fire seller.

The container itself is certain to attract attention. Its decoration is a picture in full color of a body of returning "doughboys." The men swing along, faces lighted with smiles, behind a figure of VICTORY into which the artist has painted "life and being." Even the ends of the box take part in the scheme, for these exhibit warplanes flying the colors of VICTORY against a sky of red, white and blue.

Be among the first to order the VICTORY. You need it to bring your line of assortment boxes up to full strength. Read what one jobber says:

"The first shipment of these VICTORY Assortments has just reached us, and we are so pleased with the box that we send you herewith another order for 100 to come forward at the earliest possible moment. We appreciate your giving us reasonably good service on this first lot, and trust you will follow it through with 100 boxes more. We will want several lots of these before the year is over."

United States Employment Service

ALARGE majority of the members of the National Association of Manufacturers have recorded themselves as opposed to a continuance of the Department of Labor Employment Service.

The President of the National Association of Manufacturers says:

"The last Congress was asked to appropriate the stupendous sum of \$14,000,000 for the work, but the

measure was defeated. Active propaganda is now under way to secure from the Congress just convened a measure and appropriation to make permanent this employment service.

"Its record of incapacity, extravagance and maladministration surely offers no good argument for its continuance, and I believe its further service is neither necessary nor desirable.

"Our convention, just closed, passed forceful resolutions in opposition to its continuance."



Power Farming—What the Present-day Farmer Should Know

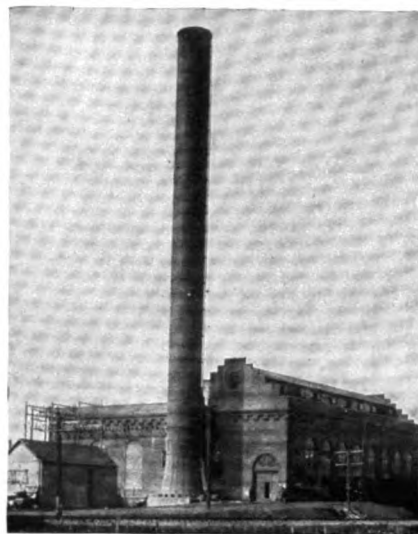
IN addition to a general knowledge of agriculture the farmer of to-day must have a working acquaintance with farm mechanics. He must know how to repair and operate various types of special machines, gas engines, autos and tractors. And what we consider to be just as important, he should know how to lubricate them.

When people realize how much better service can be gotten out of a well lubricated machine and how much longer that machine will remain useful, they will give more thought to the selection of lubricants. Instead of buying "grease," they will be particular to ask for it by brand name, and they will not expect a single lubricant to be equally suitable for everything from a wheelbarrow to a caterpillar tread. It was for the purpose of simplifying these problems that we published a "Tractioneer's Guide," which will be sent anywhere upon request.

Thousands of the "Guides" have already been distributed to classes in farm mechanics at all the agricultural colleges in the country. Many professors are trying to inculcate the fact that good lubricants pay and that good graphite lubricants pay best of all. When details of lubrication are studied and properly provided for, machinery, especially tractors, will last at least two years longer than they average now.

Our cover design this month illustrates a common sight on Minch Bros.' Fruit Farms near Bridgeton, N. J. There are no finer orchards than these in the whole country and for that reason orchardists come from far and near to observe and learn. Each of their small tractors displaced eight horses and three men—and does a better job. Notice how close the machine gets to the trees without touching the branches. Then on rainy days or in the winter the tractors keep busy sawing wood, baling hay, shelling corn, pumping water, or what not.

Besides hundreds of fertile acres devoted to raising produce for the city markets, there are orchards comprising 55,000 trees. There are 13,000 peach trees in the orchard shown on the cover. The above picture shows the same orchard loaded with the kind of peaches that "melt in the mouth." Mr. L. Willard Minch, president of the New Jersey State Horticultural Society, is caught by the camera in the act of "swiping" a basketful of beauties.



Power Plant, Indianapolis & Cincinnati Traction Co., Rushville, Ind.

THIS illustration shows the power plant of the Indianapolis & Cincinnati Traction Company, Rushville, Ind. The Dixon Company takes much pride in quoting from a letter received from Mr. S. C. Waggoner, Chief Engineer, as follows:

"Dixon's Silica-Graphite Paint has given us entire satisfaction wherever we have used it, for preserving steel structures or inside steel work.

"In this connection allow me to say that I do not believe there is a paint on the market to-day that is capable of giving any better service than that manufactured by your firm. One of the strong features of Dixon's Paint is that, after years of service, it still remains in its elastic condition. I do not believe that there is a paint made where the coefficient is as nearly identical between the paint film and the metal, the paint remaining in an elastic condition. This causes it to be impervious to moisture, dampness not getting behind it, nor gas fumes, both of which cause other paints to peel or scale off. It is also unaffected by climatic conditions of cold, heat, hail, etc.

"We have used Dixon's Paint in our plant very extensively, not only for exterior work, but also interior—upon the metal structure of the building, coal bunkers, breechings, boiler fronts, etc., and after years of application we find at this time no complaint whatever of the service received from this paint.

"Thanking you for the opportunity afforded me to express my views upon your product, I beg to remain,

Yours respectfully,

(Signed) S. C. WAGGONER,
Chief Engineer."

Mr. Waggoner makes use of no paint for protective purposes other than Dixon's Silica-Graphite Paint. He began making use of it in 1907 when the smokestack illustrated was painted and did not require any repainting until 1913. The foregoing testimonial is but one of many the Dixon Company has on file at this office.



**Sprinkler Tank System, U. S. Envelope Co.,
Springfield, Mass.**

The Beauty of Mills

NEW ENGLAND'S great number of mills tells a beautiful story,—the story of peace, prosperity, wages for a vast number of workers, safe investment, products to make life more comfortable for many millions.

The mill illustrated above is that of the U. S. Envelope Company. Mr. H. A. Bush is chief engineer. The water tank and street structure shown were painted two years ago with Dixon's Silica-Graphite Paint and are still in excellent condition. No paint equals Dixon's Paint for long and effective service, and the experienced New England engineer knows this.

The best paint should invariably be chosen for protective service, because labor is too high to be wasted in frequent repainting.

Dixon's Silica-Graphite Paint solves the long-service paint problem. Dixon's is a guarantee of efficiency.

Cylinder Lubrication

1111 LUCAS STREET,
WAUKEGAN, ILL., May 20, 1919.

"For many years I have used Dixon's Flake Graphite with heavy oil for building up worn and scored engine cylinders with wonderful success. I have taken discarded engines that were thrown away on account of no compression and built up the cylinders so that they gave as good compression as when new, by using flake graphite and very heavy oil, and the owners have got many years' more wear from the engines.

"With stationary engines the problem of feeding the graphite is simple, but I have as yet found no practical way of feeding it to a Ford engine. I know that it will do the work if I can feed it to the engine properly. I am writing you to ask if you have any suggestions, or if you know of a cup that will do the work.

"Many thanks for GRAPHITE. I miss it as much as any of my papers when it fails to come, which is very seldom.

"Thanking you in advance for any help you may be able to give me, I am,

(Signed) W. D. BROWNE."

Of course, it is much better to prevent engine cylinders from becoming scored and worn, than to build up the cylinder walls to prolong the life of the engine after they are scored.

This can best be done by the regular and continuous use of Dixon's Ticonderoga Flake Graphite, in addition to the oil. The most convenient and satisfactory way of feeding graphite to the cylinders is by the use of special lubricators. There are a number of such lubricators on the market and the manufacturers are willing to send them for trial.

Special cups for feeding Dixon's Motor Graphite to automobile engines are manufactured by the Woolf Graphite Lubricator Company, Omaha, Neb., and the Charles H. Buettner Company, Cincinnati, Ohio.

We will gladly furnish detailed information about graphite lubrication for engine cylinders upon request.

Mr. J. H. Rosseter

Director of Division of Operations, United States Shipping Board,
Washington, D. C.,

WRITES Mr. E. N. Hurley of the United States Shipping Board, that he, Mr. Rosseter, wishes to state with utmost emphasis and firm conviction that there are no insuperable obstacles to the success of the United States in competition with other nations in the matter of successful operation of ships under the American flag in foreign trade.

Mr. Rosseter says it often happens, in large questions, that the controlling factors are overlooked or neglected. The amount of wages paid is to be properly measured by accomplishment. It is true we have a larger number of officers and men on a ship than is required under foreign flags, and that we pay higher wages and provide better food, all of which cost more than our competitors are paying. That is not to be contradicted and, for Mr. Rosseter's part, is not to be changed. He confidently expects, as his own experience has proven, that we get better and more efficient service from men who are well paid and well fed.

The high cost of larger crews at higher pay and extra cost of victualing can be fairly stated as amounting to less than two per cent. of the total operating expense.

This can be entirely offset, and more, by a reasonable increase in the speed of our ships and by improving loading and discharging equipment, thus reducing the time in port as well as on voyage.

Again, there is the problem of improving the method of propulsion by utilizing the great natural advantage we hold in our supply of oil fuel. Even with the ordinary reciprocating type of engine we get one-third greater distance from a ton of oil than from a ton of coal, besides doing away with the so-called "black squad," which means a reduction of at least six men in the engine room. So great are the possibilities in the field of propulsion that Mr. Rosseter will not venture even a surmise as to what may be accomplished in that respect.

National Waste

THE seemingly indifferent appreciation of the vital seriousness of the destruction of our natural and created wealth and resources has made the United States appear callous and shameless in the eyes of other nations.

To quote from a well-known writer and speaker:

"The people of the United States, as a whole, born and bred as they have been in a country of apparently boundless natural resources, have failed to grasp the economic significance of the annual waste which is now giving deep concern to the few who are making careful studies and investigations of what is now recognized to be an unnecessary national affliction. Those who are born to great wealth and who accept such an environment without original thought do not usually realize the sources from which such wealth is drawn until a curtailment of the supply precipitates an investigation. The thought to which the American mind has long been a victim—namely, that our natural resources are unlimited—has resulted in the disregard of our created resources as well."

Taking Care of Your Health

WHEN one has been overworking, undersleeping, overdrinking, overeating, and underexercising, germs multiply rapidly because the "white wings" of the human system are too tired to clean them out.

A long illness follows.

Some day we will tell the truth in the death certificates and the reports will be made out like this:

"Died after thirty years of over-eating."

"Smothered himself to death. Worked and slept in unventilated rooms."

"Poisoned by his wife who cooked too well."

"Burned out. Slept only six hours a night."

"Killed by high living."

Good health is a luxury which all of us can enjoy if we are willing to play the game on a long law of averages.

Eat lightly, drink lots of water, breathe fresh air night and day, get plenty of sleep, keep clean inside and outside, and Father Time will pass you by.—*The Fortuna Magazine.*

One Way of Treating a Customer

IN one of O. Henry's stories we find the following which may or may not apply to any one of us:

"At the cashier's desk sits Bogle, cold, sordid, slow, smouldering, and takes your money. Behind a mountain of toothpicks, he makes your change and files your check and ejects at you, like a toad, a word about the weather. Beyond a corroboration of his meteorological statement, you would better not venture. You are not Bogle's friend; you are a fed, transient customer and you and he may not meet again until the blowing of Gabriel's dinner horn. So take your change and go—to the devil if you like. There you have Bogle's sentiments."

A Real Help

NORFOLK, VA., April 8, 1919.

Gentlemen:

Your representative called on me some time ago, just when I was in a very bad predicament with some of the gasoline pipe connections leaking. I had tried everything known by science—white lead, glycerine, litharge, red lead, shellac and even laundry soap—without results, especially where there was gasoline flowing through the lines.

It was suggested that I try Dixon's Pipe Joint Compound, which I did, and found it overcame the trouble. I have used it ever since, with the result that all the difficulty we have experienced in securing tight joints on our gasoline pipe lines, pumps and connections has been eliminated.

PORTER BROTHERS,
(Signed) J. Sweeney,
Supt. Oil Division.

April 25, 1919.

Gentlemen:

Kindly send me all information and booklets pertaining to the lubrication of Cadillac cars.

I have used your greases for several years in all parts of my car in many miles of service and they have given a most gratifying satisfaction.

R. PRESTON WENTWORTH,
Photographic Engineer.

"WHAT are you laughing about?"

"Now that peace is here I'm thinking of the poor guys who got married to escape the draft."—*Judge.*

GOLDEN BOUQUETS

OR WHY

DIXON'S
ELDORADO

"The Master Drawing Pencil"

SHOULD BE USED

From an Educator:

"I WISH to say we have used your ELDORADO pencils both for drawing and general work in the evening classes and have found them extremely satisfactory. I, personally, consider the graphite of extremely uniform quality, showing that it is undoubtedly well mixed and prepared."

A Publisher writes:

"THE samples of ELDORADO pencils to which you refer in your letter of November 16 were received and we liked them so well that we immediately placed orders for our requirements."

A Steel Co. says:

"WISH to advise that we recently purchased two gross of ELDORADO drawing pencils from —."

A Treasurer writes:

"THE samples of Dixon's ELDORADO you sent were very satisfactory and I have been supplied through your dealer in —."

A Mill Owner writes:

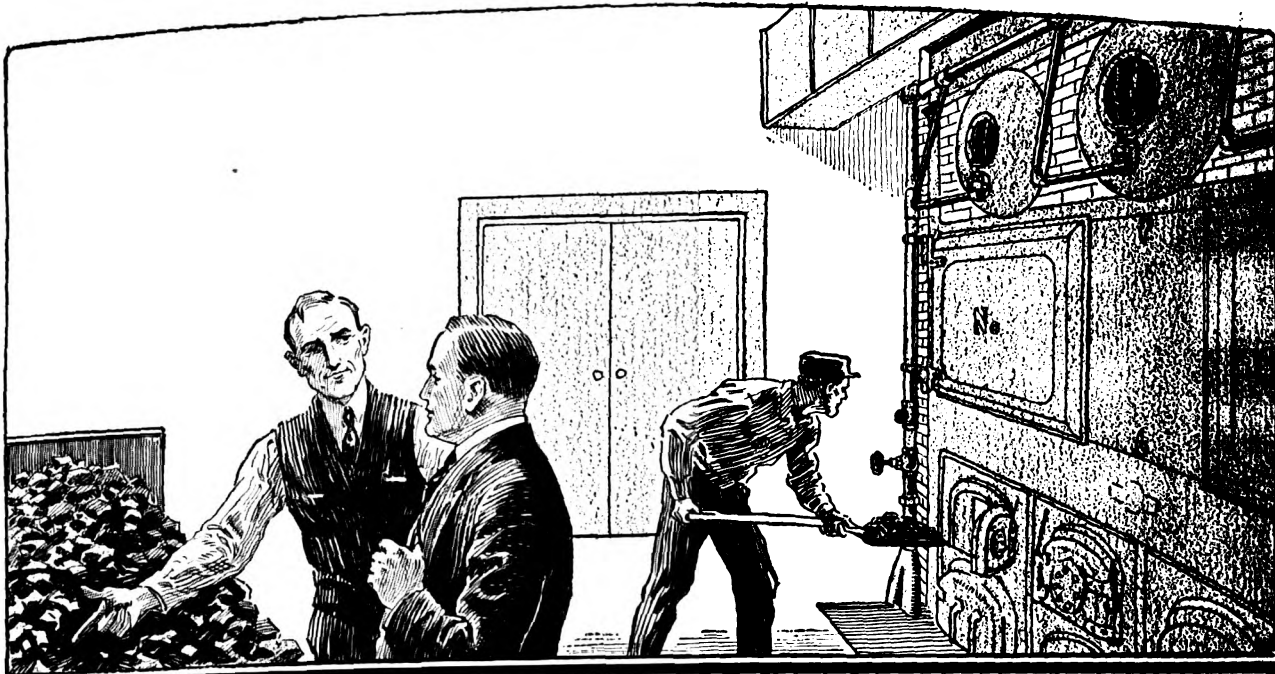
"WE received ELDORADO samples you sent and they gave entire satisfaction, so much so that we ordered some. Thanking you for the samples that put me wise to a good pencil."

From a Certified Public Accountant:

"REGARDING Dixon's ELDORADO pencil, we wish to say that we are now using this pencil entirely in our office and find same very satisfactory. We are purchasing them through stationers of this city."

From a Professor of Architecture:

"IN this office we are using nothing but your ELDORADO pencil. In the work of the Department of Architecture, that is, the structural work, they use the same."



Clean Boilers Keep the Coal Pile High

The best way to combat boiler scale is by using Dixon's Pioneer Boiler Graphite. It is simplicity itself.

**DIXON'S PIONEER
BOILER GRAPHITE**

acts mechanically, not chemically, and is absolutely safe and harmless.

It cuts the cost of cleaning tubes and drums in half. But the biggest saving is in coal.

Our Booklet No. 190-T, "Graphite for the Boiler," will be a help to you. Write for your copy today.

Made in Jersey City, N. J., by the

Joseph Dixon Crucible Company



Established 1827



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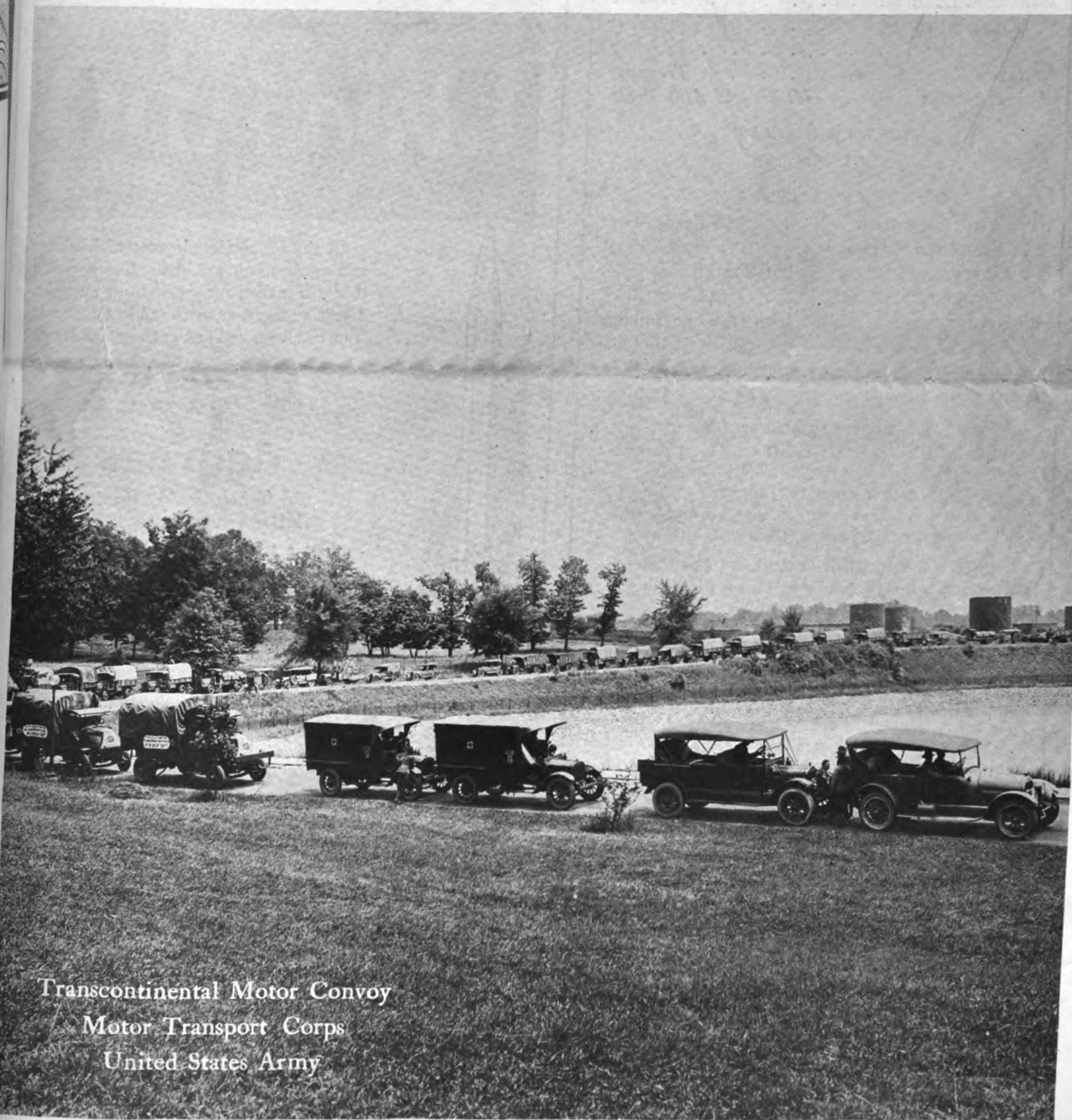
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AUGUST, 1919



No. 8



Transcontinental Motor Convoy
Motor Transport Corps
United States Army

JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED 1827 Jersey City, N.J., U.S.A. INCORPORATED 1868

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Manufacturers of Graphite,
Plumbago, Black Lead** 

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A. R. MacDougall & Co., Ltd., 468 King St., West, Toronto, Ontario, Can.

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS

Canadian Asbestos Company, Montreal, Quebec, Can.

Quick Thinking Demands Quick Writing

Whether in Writing, Accounting or Drawing, the pencil which most easily and quickly records your mental processes is

DIXON'S ELDORADO

"the master drawing pencil"


In the 17 perfect degrees of hardness and softness you are assured of a pencil that will make your pencil-work a delight. Leads, strong, responsive and long wearing. The Eldorado makes for genuine economy.

Made in 17 degrees

6B (softest) to 9H (hardest),
HB (medium) for general use.

Get a trial dozen from your dealer, or send 10c for a full-length pencil mentioning dealer's name and whether very soft, soft, medium, hard, or very hard lead is desired.

Joseph Dixon Crucible Co.

 *Established 1827*
Dept. 190-J, Jersey City, N.J.

Canadian Distributors
A. R. MacDougall & Co., Ltd.
Toronto, Ont.

There is a Dixon-Quality pencil, crayon, and eraser for every purpose





It is but natural that the development of any live American industry during the past two years should

have been largely dependent upon conditions arising from the great war. If the industry could serve the nation in its emergency, that industry was bound to grow in scope and production. We can speak from experience of the progress made in the field of lubrication during this period.

Perhaps the two most common watchwords of the time were "Service" and "Conservation." It is not difficult to see the intimate relation between these ideals and the field of lubrication.

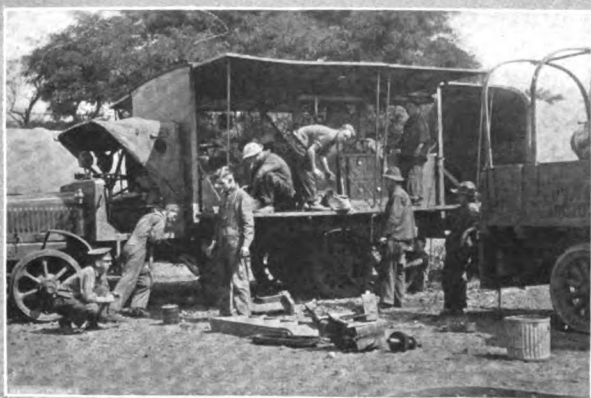
Any industry classed as essential, and there were many of them, was urgently called upon for increased and better production at high speed. Moreover, due to the very nature of the circumstances, these increases in output could not be accomplished by corresponding additions to plant and machinery. Time and materials were lacking for these additions. The situation required overload and sustained production from peace-time equipment.

Two Years of Lubrication

This situation as applied to the mechanical industries raised the potential value of any productive

machine and its product to a new and higher figure. It became well worth while, even absolutely necessary, to study the conservation of both that particular piece of machinery and its product. In the majority of instances conservation proved to be a matter of proper lubrication. Given this just consideration, the equipment was able to "carry on" for an indefinite period with a minimum of attention. The same equipment, given the former careless lubrication, would have broken under the strain.

It is in this increase in interest and appreciation of the value of scientific lubrication, and in the new opportunities for its application, that we find the big step forward in the industry during the last two years. To disregard these lessons in the future merely because the emergency has passed would be costly. "Dixon" will continue to stand for service and conservation through scientific lubrication of machinery in all classes of industry.



Transcontinental Motor Convoy, Motor Transport Corps, U. S. A.

OUR cover this month shows a part of the Motor Convoy of the Motor Transport Corps, U.S.A., which left Washington, D. C., Monday, July 7th, for San Francisco, Cal. The illustrations on this page also show part of this same convoy being prepared for this trip.

The trip is primarily for the purpose of showing the need for good national highways and the feasibility of cross country motor transportation. It will also further demonstrate the high quality of the motor vehicles standardized by the Army as a result of the World War.

Another feature of the trip will be the recruiting of young men desiring to enter the Army and take advantage of the Motor Transport Corps Schools to be opened in September.

The Convoy will consist of some sixty motor vehicles and will be accompanied by observers from various branches of the Army. The Engineer Corps will make a study of the condition of the terrain and highways and will later make a report of the conditions as actually encountered.

It is with much pleasure that we announce that a number of the trucks in this Convoy will be lubricated with Dixon's Graphite Automobile Lubricants, further evidence of the high quality of these lubricants. The illustrations on this page show, as before stated, some of the trucks being prepared for the trip, and you will note that in every one the familiar container is shown in actual use. Dixon's will be on the job every minute of the trip, and the results will afford proof that they are a sure protection against gear wear under all conditions of load and weather.



The Cutting Action of Crystolon and Graphite

QUITE frequently we have our opinions "O.K.'d" by competent impartial judges. This time it is the Committee on Superheater Locomotives of the American Railroad Association, who say in their report:

"On the railroads using slide valves no change was made in the oiling or lubricating devices when bronze valves were used, but where the original cast-iron valves were used some trouble with cutting the seats was experienced. The application of an additional system of graphite lubrication stopped the trouble."

Quite independently of this report of actual running conditions, we made some interesting studies on the cutting action of mixtures of crystolon and graphite. These studies were made by rubbing brass plungers $\frac{3}{8}$ inch in diameter across a steel bedplate. The mixtures of graphite and crystolon between the two caused the cutting action on the brass plunger. The loss in weight of the test pieces measures the abrasive action. In order to eliminate any possibility of the cutting action because of different sizes of particles, both the graphite and crystolon were screened to .0038 inch, .0041 inch, 150 to 160 mesh of the Tyler Testing Sieve Scale.

Mixtures of the two in varying proportions were made up. These ranged from pure graphite at one end to pure crystolon at the other. Two series of runs were made, one to simulate the cutting by means of dry abrasives and the other to duplicate the case of oil cutting.

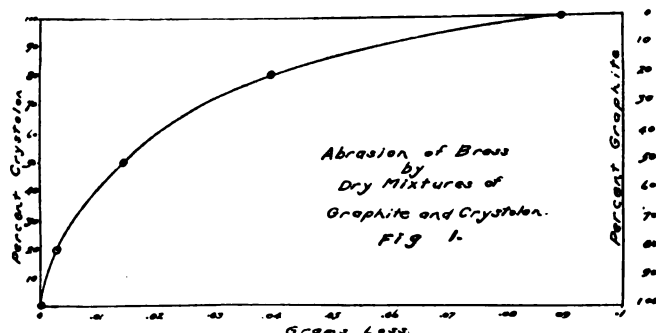


Table 1 Series A

Test No.	Composition of Mixtures		Grams Loss	Revolutions
	Graphite	Crystolon		
1	1000000	30,300
7	80	20	.0028	29,820
16	50	50	.0144	29,520
17	20	80	.0400	30,540
18	...	100	.0891	30,480

Table 1 is a record of Series A, which was made with dry mixtures of graphite and crystolon. The results of this series are shown in Figure 1 with the grams loss plotted against the percentage of crystolon. The outstanding features apparent to every one are, first, no abrasion with 100% graphite; second, that the graphite protects the test pieces from the heavy cutting action of the crystolon, but as the percentage of crystolon increases the abrasion increases out of all proportion to the amount of crystolon. The reason is very evident for this, as the wear is taken up by the graphite and the abrading action of the crystolon is deadened.

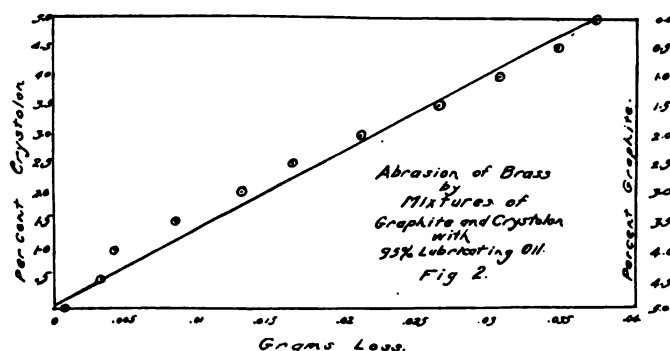


Table 2 Series B

Test No.	Composition of Mixtures			Grams Loss	Revolutions
	Oil	Graphite	Crystolon		
2	95	5.00009	20,480
5	95	4.5	.05	.0033	31,080
8	95	4.0	1.0	.0043	31,080
6	95	3.5	1.5	.0085	31,080
9	95	3.0	2.0	.0129	30,180
11	95	2.5	2.5	.0164	29,700
10	95	2.0	3.0	.0210	30,860
12	95	1.5	3.5	.0264	30,300
13	95	1.0	4.0	.0306	30,000
14	95	.5	4.5	.0345	30,480
15	95	...	5.0	.0370	30,600

Table 2 is a record of Series B, made with mixtures of 95% lubricating oil, the other 5% being graphite and crystolon mixtures. These results are shown in Figure 2, in which the grams loss is plotted against the percentage of crystolon, which shows the abrasion to be almost exactly proportional to the amount of crystolon in the mixtures. This is to be expected, as the graphite is floated by the oil and so cannot exert the protective effect that it does in the dry mixtures.

In view of these results it is not at all remarkable to find that these railroad men found that the cutting of cast iron valve seats is prevented by graphite lubrication, when we find that graphite effectively reduces the abrasion caused by the polisher of diamonds.

"In Preference to Any Other"

IT is easy to say that a product is better than any other, but the real test comes when a dealer or jobber carries that particular line "in preference to any other."

Among the letters that we have received from dealers and jobbers telling us their opinion of Dixon's Graphite Automobile Lubricants, the one quoted below with a great deal of pleasure is from The Auto Supply Co., Hutchinson, Kan.:

"We have been handling Dixon's Graphite Automobile Lubricants for eight years, and we have enjoyed a steady growth of business as jobbers on your products. We have never had a complaint in the whole time that we have been handling your products and have found an increase in sales on same. Every year has brought more business, and the main thing is that all customers we have sold your products to have been satisfied.

"We carry your line of Graphite Lubricants in preference to any other. The writer, having been in the auto supply business for about eighteen years, can vouch for the coöperation your Company offers to the jobber, and our advice to the owners of automobiles is to use only Dixon's Graphite Products."



What Joe Thomas Says

"AS you know, my Mercer racing car is lubricated throughout with Dixon's Graphite Automobile Lubricants. Prior to the Independence Day event at Sheephead my car was taken down and carefully examined, especially the ball bearings in the transmission and differential units, and I believe you will be interested to know that I found the — ball thrust bearing in the differential in perfect condition, showing no signs of wear and with just the right tolerance. This particular bearing has been in use since 1915 and had always been lubricated with Dixon's No. 677.

"While it is unnecessary, in closing I might say that you can always bank on my using Dixon's Graphite."

Versatile

"WE use several products of the Dixon Crucible Company," states the chief electrician of the San Francisco *Bulletin*. "Seventy motors are operated with Dixon's Graphite Brushes, which are superior to any other make of brush we have ever tried. They are wonderful brushes."

Dixon's Waterproof Graphite Grease is used for lubricating pump plungers, open gears and hydraulic rams. Various grades of Ticonderoga Flake Graphite improve the operation of bearings, compressors and type-setting machines. Dixon's Grease No. 677 helps to speed up the delivery of papers to the newsdealers by keeping their automobiles young and frisky.

In addition to the indispensable part graphite plays in the publication of this popular newspaper, it is interesting to know that Dixon's Silica-Graphite Paint protects the metal roof of the *Bulletin* Building from the harmful action of the elements.

For versatility the Dixon products are unique. For general satisfaction they are unbeatable.

"In a Class by Itself"

WE have always thought this of Dixon's Graphite Automobile Lubricants, but have hesitated to say so ourselves. Now, however, one of our dealers writes and tells us this and other nice things.

It is with considerable pleasure that we quote a letter from the Fly Automobile Tire & Accessories Co., Kansas City, Mo.:

"We consider Dixon's Graphite Lubricant in a class by itself. When we get a customer for 'Dixon's,' he always orders again. Your coöperation is both satisfactory and helpful."

Dixon's Helps to Break Another Record

ONCE more Dixon's Graphite Automobile Lubricants have demonstrated their better lubricating qualities by helping Gaston Chevrolet break the world's record of 100 miles at Sheephead Bay track, July 4th.

Leading the 100-mile Derby for practically the entire distance and making no stops, Gaston Chevrolet, in his Frontenac Special, clipped three seconds from the world's record, winning the event with a time of 54 minutes and 17½ seconds.

Other racers who lubricated with Dixon's in this race and who won places were Dave Lewis, Eddie O'Donnell, Ira Vail, Denny Hickey, Joe Thomas, and William Vetere, finishing third, fourth, fifth, sixth, seventh and eighth, respectively.

In a race of this kind and particularly where a world's record is broken by seconds, the lubricant used must be able to stand up under the terrific strain imposed upon it. Every part must do the work intended for it, and necessarily the lubricant used must be the best.

Practically all the prominent racers to-day lubricate their cars with Dixon's Graphite Automobile Lubricants. The reason for this is that in all races it has been able to help the car stand up under the strain that is put on it. Past experience with Dixon's has taught these drivers that Dixon's can be depended upon to give every ounce of lubrication possible.

What is true for the racers is also true for passenger cars and truck drivers. A lubricant that will stand the heavy work of racing and thoroughly lubricate all parts under this strain will with ease lubricate under ordinary driving conditions and give the motorist better lubrication than is possible with ordinary lubricants.

Dixon's Graphite Automobile Lubricants will make your car last longer, run easier and materially reduce your repair bills. Write to the Joseph Dixon Crucible Co., Jersey City, N. J., for their Booklet No. 190-G telling more about how you can keep your car young.

"The King of Lubricants"

WE have had a number of nice things said about Dixon's Graphite Automobile Lubricants, but the above is the best yet. It is a great pleasure to us to have these things said, and we take greater pleasure in quoting below a letter from the Auto Supply Company, Boston, Mass.:

"We wish to state that we have been using Dixon Products for a great many years and have always found them to be very satisfactory.

"The treatment we have received from your Company has been more than fair, and we find that your graphite greases are a great deal better than any we had used before taking on your line, and we can safely recommend them to any one. In the years that we have been selling this product, we have never yet had a dissatisfied customer. Once he has been sold any of Dixon's Graphite Greases (and we are positive when we make this statement), he will never use anything else.

"We find Dixon's Graphite Automobile Lubricants are 'The King of Lubricants.' They Lubricate!"

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THERE is not much use in starting on the right road unless you keep on moving. Save regularly and get ahead with your War Savings Stamp fund.



Attractive Window of Gaul, Derr & Shearer Co.

A RECENT attraction along "Automobile Row" in Philadelphia was a display of Dixon's Graphite Automobile Lubricants in one of the large show windows of the Gaul, Derr & Shearer Co., 215-17 North Broad Street.

The occasion afforded an opportunity for many to become favorably acquainted in a broader way with the supreme lubricating value of the Dixon Line.

The Gaul, Derr & Shearer Co. about January 1, 1919, informed the trade of their intention to adhere to a jobbing policy exclusively, which they report has proved very satisfactory from every standpoint. For many years they have shown their confidence in the Dixon Lubricants by increased sales.

Gas Masks and Lubrication

IN the endeavor of the United States Army officials to produce a carbon to be used in gas masks for the protection of soldiers against poisonous gases, search was made among all the available carbonaceous materials.

The best possible absorbent was produced from cocoanut shell charcoal with charcoal made of other nutshells close behind.

A very exceptional charcoal or carbon was made from anthracite coal of about 90% carbon, yet gas retort carbon of over 99% could not be made into even a very poor absorbent.

Upon further and most careful study and examination, it was found that the form or structure was the determining

factor. It was discovered that charcoal, or carbon, produced from what had been vegetable matter, such as anthracite coal, or woody fiber, such as cocoanut shells, developed a honeycomb structure of very small pores and because of these pores the poisonous gases were taken up or absorbed.

Gas carbon developed no form or structure at all and would not absorb any of the poison gases.

It may seem a long way, or, as they say, a far cry from poison-gas warfare to lubrication, but here again the same principles are brought to light.

In some experiments made in our laboratories to determine the wearing qualities of brasses under a load of eighty pounds per square inch, no appreciable wear was found when using the graphite which the Joseph Dixon Crucible Company puts into its lubricants.

But when these same brasses were rubbed the same length of time and the same number of times under the same pressure, using a graphite of the amorphous variety with a purity of over 99.5%, the surface of the brass was scored and the loss in weight of brass was considerable.

The explanation comes to us through the study and examination made by United States Army officials in their search.

The Dixon Company's graphite or carbon consists of the finest flakes possible. These flakes have a remarkably low coefficient of friction and when rubbed one over the other, easily and smoothly slide on their surface, as there are no projections to catch into.

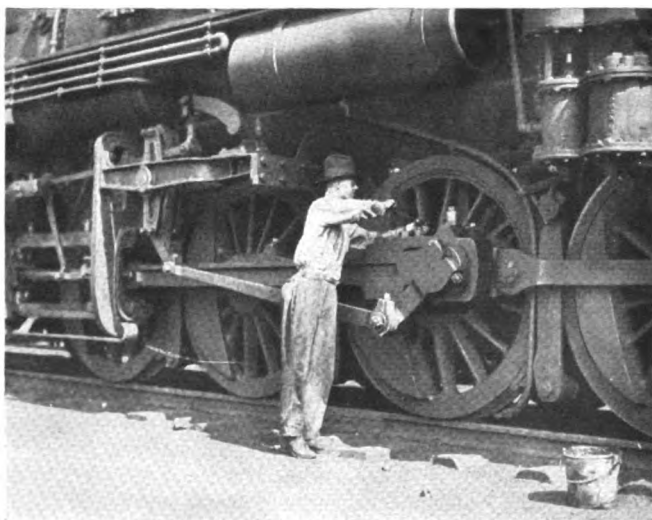
The amorphous graphite, however, is irregular in shape, so that all of the corners, as it were, catch with one another, and after some little time form a very compact dense mass.



Dixon Exhibit at the American Railroad Association Convention

JOSEPH DIXON CRUCIBLE COMPANY'S products were inspected and discussed by representative railroad men from every section of the United States at the annual convention of the Mechanical Department of the American Railroad Association, held in Atlantic City, N. J., from June 18 to 25. Hundreds attended, many of whom visited the Dixon exhibit during the Convention.

The Dixon exhibit, a photograph of which appears at the top of this article, occupied a conspicuous position skirting the large convention ball-room. Each day of the convention the exhibit, which formed an ocular object lesson in lubricating economy, was a center of attraction and interest to the visiting railroad men. Dixon representatives were present to explain the uses of the products on display and to answer questions.



Applying Dixon's Hub Liner Grease

In addition to the nationally known Dixonian line, there were displayed for the first time several new departures in the way of graphite lubricants for railroads. A Hub Liner Grease for the lubrication of locomotive hub liners, shoes, wedges and chafing castings, not only attracted considerable interest, but won generous praise from the experts present. Among them were many who expressed the opinion that the Dixon Company had manufactured a lubricant which will greatly prevent the cutting and wearing of hub liners and kindred mechanical devices.

The attention of the railroad men was also focused on an exhibit of Dixon's Diaphragm Face Plate Compound for preventing disagreeable car squeaks and loss of power due

to the chafing of dry diaphragm plates, especially in the rounding of curves. The lubricant is prepared under a Dixon formula. It dries quickly like a paint, and dirt and dust will not cling to it.

Dixon's Graphite Air Brake Lubricants, though not new to the railroad world, nevertheless came in for many encomiums from skilled railroad men whose business it is to know the class of lubricants that constitute a standard.

"Dixon's Air Brake Lubricant is the only grease that will stick to the top of a brake cylinder in hot weather," said one of the foremost air-brake engineers attending the convention. Another volunteered the statement that his road would save money if Dixon's Lubricant "sold at a dollar a pound."

Aside from this unstinted praise from men foremost in their professions, a practical demonstration of the economical uses to which Dixon's Air Brake Lubricant can be put was given by the exhibition of a brake cylinder leather which saw ten years' continuous service on one of the large Eastern roads. During this decade of service Dixon's Lubricant was used exclusively.



When the leather was removed the filler was found in good condition, thus corroborating the statements of air-brake engineers at the convention that in the use of Dixon's Air Brake Lubricant they had discovered a grease that would not destroy the filler in brake cylinder leathers.

In the Dixoniana of graphite products at the convention were displayed Pencils, Crayons, Crucibles, Automobile Lubricants and such special lines, manufactured exclusively for railroads, as Graphite Joint Compound, Graphite Centerplate Grease and Graphite Engine Front Finish.

The exhibit was scientifically yet artistically arranged, with ample sitting room for visitors. On the walls were displayed many pictures and enlarged photographs of bridges and buildings throughout the country painted with Dixon's Silica-Graphite Paint.

"Good Appearance of the Containers"

LETTERS from dealers and jobbers have been quoted, telling of the high quality of Dixon's Graphite Automobile Lubricants, but here is one that not only tells of the quality of the goods themselves, but also of the attractive appearance of the containers.

We have endeavored to make these containers as attractive as possible so that they make an impression on the customer and thus aid the dealer in selling the product.

With considerable pride and pleasure we quote a letter from the Atlantic Automobile Co., Atlantic City, N. J.:

"We desire to thank you for your hearty coöperation and assistance in enabling us to make quick turn-overs with your products. We also want to particularly mention that, aside from the high quality of your Automobile Lubricants, we desire to compliment you on the good appearance of the containers in which they are forwarded.

"We have found that the attractive appearing packages of Automobile Lubricants are already half sold."



The Plant Behind Dixon's Graphite Productions

DIXON'S Graphite Products are backed by a concern that has been in existence since 1827,—nearly 100 years. The plant, if we may use the term singular when speaking of factories, mines and mills, is equipped throughout in keeping with the most modern engineering and manufacturing requirements.

It represents in each department the standards of thoroughness and efficiency which are characteristics of up-to-date manufacturing organizations.

The purchaser of any one of the various Dixon Products, whether crucibles, graphite lubricants, graphite lead pencils and crayons, silica-graphite paint, graphite brushes or commutators, erasive rubbers or any other product, has a guarantee of first quality of raw materials, skilful workmen, careful and exacting foremen, superintendents and executives.

All this means that any user of any of the Dixon Graphite Products is sure that future purchases will be of the same high quality and that they can be obtained promptly and with the assurance of maximum satisfaction.

The Dixon Company has built its large and varied plants with the money that has come for high-grade goods, and this means that the Dixon Company has a reputation behind it which it intends to sustain for all time. It means, further, that the Dixon Company safeguards fully the interests of its patrons.

Generous Treatment

OCCASIONALLY we cannot resist giving ourselves a pat on the back and we therefore print the following not because of the rarity of such letters but because of their graceful wording:

"We at this time wish to say a kind word for the co-operation you extend to your dealers in furthering the interest of Dixon Products, and the standard of your goods, along with your generous treatment, makes it a pleasure to carry your line."

And This One Also:

"We are pleased to testify to the superlative quality of your products and we can give you no higher praise than to quote the words of our Sales Manager, who said, 'Dixon's Products are the best ever.'"

"We have always found your coöperation satisfactory and we trust that the cordial relations between your company and ourselves may extend through many years to come."

Both of the above letters came in the same mail.

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SHALL he who cannot do much be, for that reason, excused if he does nothing?



Pickett Cotton Mills, High Point, N. C.

THE above illustration shows the Pickett Cotton Mills. The Dixon Company is proud to be able to say that "Mr. Pickett, the president, states that his company is a satisfied and considerable user of Dixon's Silica-Graphite Paint."

The metal work around the plant is protected with Dixon's Silica-Graphite Paint. It was applied some five years ago, and repainting has not occurred to date.

Dixon's Paint is widely used by cotton-mill owners for the protection of metal work such as smokestacks, boiler fronts, fire escapes, metal window frames, cornices, iron shutters, fences, inner surfaces of steam drums, etc., and wooden surfaces such as tanks, wooden buildings, etc.

An Intelligent Appreciation

THERE is something final and satisfying as well in having the general public and practice back of you. It is so much better than relying on your own private opinion, especially when you have had no experience in that particular matter in which you are interested.

A judge elected by his fellows stands in an enviable position. A general manager whose régime is backed by the shareholders is a strong man. A lady whose silver is Gorham's, whose gold is Tiffany-make, and whose gowns are "Worth," has the consent of the public that her property is standard in value and service.

It is the same thing with a protective paint that is offered for public use. If the paint is backed up by the endorsement of those who have had long experience with it, and have approved of it, you can buy it with full confidence.

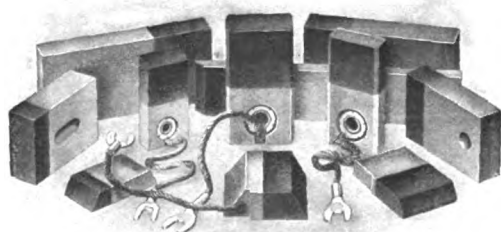
If you pass a building being painted with "cheaper per gallon" paint, you reflect, "I hope the owner and the products of the building are not also inferior in value." You pass another building, bridge, or tank being painted with Dixon's Silica-Graphite Paint, and you reflect, "These people must be reliable, they use the best paint. They have capital behind them. They are intelligent figurers, we can trust their products and service."

It is worth while to appeal to and accept your authority from the public, whether it be a title, a deed, or a protective paint that is concerned.

This little bit of philosophy should teach you to specify and use Dixon's Silica-Graphite Paint, which is the highest standard, widest known protective paint for metal and wood.

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THE person who doesn't save goes without worth-while things to-day, and will go without them to-morrow. The person who saves has everything he needs to-day, and will have still more to-morrow. Buy War Savings Stamps.



Dixon's Graphite Brushes for Motors and Dynamos

AN electric generator or dynamo is a machine that converts mechanical energy (supplied by an engine) into electric energy and forces electric current to flow along definite circuits so it can be utilized for heating, lighting or power. An electric motor transforms electricity (supplied by a dynamo) into mechanical energy or power. In the case of both dynamos and motors the "brush" is a necessary link between the revolving commutator and the fixed circuit through which electricity flows. Brushes are made of copper, carbon, graphite or combinations thereof.

Copper brushes are used only when the current is very high.

Carbon brushes are usually cheaper than other kinds and are therefore extensively used. The harsh abrasive nature of carbon causes the brushes to scratch the copper of a rapidly revolving commutator, and in a short time the commutator is scored so badly that brushes no longer fit properly and sparking results. Conditions always become worse until the commutator has to be ground down to a smooth surface again. That is an expensive operation. The only advantage possessed by carbon is that it will carry more current than pure graphite will.

Dixon's Graphite Brushes, however, cannot possibly cut a commutator. On the contrary, if it is in good condition when Dixon's Brushes are applied, it will soon take on a dull, glossy polish. They prevent sparking (unless not properly adjusted) and wear of the commutator. They are self-lubricating, do not gum the copper, run quietly, reduce sparking and last a long time.

The contact loss is less with Dixon's Brushes because of their greater density. In other words, they fit closer to the commutator than any other brush on the market. They also have a decided advantage because their losses from friction on the commutator are less, due to their self-lubricating qualities.

The contact resistance of Dixon's Brushes is higher than carbon, thus cutting off the trailing spark which you so often see. This spark bites into the copper and soon necessitates turning down the commutator. If Dixon's Brushes spark it is due to a rough commutator or high mica, which causes the brushes to wear too fast and leave a deposit on the commutator. This is easily remedied by eliminating the rough spots.

Graphite Brushes are not at present recommended for some special classes of service, such as for motors on electric railway cars, electroplating machines, electrical equipment on automobiles, etc., because the heavy current employed requires brushes of carbon or copper. In almost every other case they are far more satisfactory than other types of brushes can possibly be.

"We Stock Your Line Exclusively"

THE above quotation from a letter received from the Bertram Motor Supply Co., of Butte, Mont., which is also quoted in full below, is more evidence that a dealer can stock one good line of auto lubricants and make it pay better than by stocking several lines and selling a little from each.

When this question is considered, however, a line should be stocked such as Dixon's Graphite Automobile Lubricants, for with it you will always be assured of the manufacturer's coöperation as well as satisfied customers.

Here is the letter in full:

"We have not carried your line very extensively in the past, but we have always considered it the very best line of Graphite Products on the market.

"We have now decided to stock your line exclusively from now on, and when your representative was with us the other day we gave him an immediate order covering several items we have never stocked before.

"This shipment will give us a line on our requirements, and in the future you may look for all of our business in the graphite line."

Has Read "Graphite" for Fourteen Years

THE Chief Engineer of a large concern in New Jersey has asked us to exchange his address for GRAPHITE and adds as follows:

"I have been on your GRAPHITE mailing list, if I remember correctly, since the year A.D. 1905. During this time, I do not think that I have failed to receive a copy each month.

"I realize that apparently I am not very appreciative, but I never read each monthly issue without having a little stab in my conscience at not having dropped you a line occasionally in way of thankfulness.

"I am a great, though very patient, sufferer from chronic mental and physical laziness, which, coupled with a daily labor consuming twelve to fourteen hours of a possible twenty-four, has quite a dampening effect on any efforts at letter-writing."

We have thanked this gentleman for his letter and have said to him, as we want to say to you, that we are always glad to hear from the readers of GRAPHITE, and are also glad to hear from them in regard to the uses of graphite, either *pro* or *con*, as there is considerable for us to learn in regard to graphite and its uses.

Dixon Coöperation Helps to Sell Goods

IT is the policy of this Company not only to sell goods to a dealer, but also to help the dealer sell these goods to his customers. It is with such a policy that we have been able to put across to the automobile owners of this country the story of Dixon's Graphite Automobile Lubricants and how they will give better lubrication.

The letter quoted below with pleasure is from the George L. Carroll Co., Philadelphia, Pa.:

"Beg to thank you for the kind coöperation rendered by your salesmen in their daily talks with automobile users; also your letters to our customers explaining the proper use of lubricants.

"We find that the above work has enabled us to sell a greater amount of Dixon's Graphite Lubricants, and trust they will continue, as they have proven to be a great help to us and no doubt to other dealers."

The Colgate Case

MR. JUSTICE McREYNOLDS, sitting in the United States District Court for the Eastern District of Virginia, was of the opinion that—

"The indictment should set forth such a state of facts as to make it clear that a manufacturer, engaged in what was believed to be the lawful conduct of its business, has violated some known law before it can be haled into court to answer the charge of a commission of crime," and held that the plaintiff "fails to charge any offense under the Sherman Act or any other law of the United States, that is to say, the substance of the indictment and the conduct and act charged therein."

In other words, the Court upheld the practice of the Colgate Company to insist on the maintenance of its prices, with the privilege of refusing to sell to any dealer who cut its prices.

Improved Spuds

WE read in the daily papers that Professor Quanjer, called sometimes the "Dutch Potato Wizard," is here. He is professor of plant pathology in the Holland State College of Agriculture and his specialty is spud eugenics. What Burbank is to America, Professor Quanjer is to Holland.

It is said that he created a scientific breed of spuds that excel anything grown elsewhere, and he is here to help show the American farmer how to improve his potatoes.

Painting for Safety

DON'T guess that any paint, or some paint, will fit your case. Safety of metal surfaces or of wood surfaces lies in full and proper protection by means of a paint that will successfully resist the action of weather and the acid fumes that are always found in cities and towns where coal is burned.

Safety lies in *knowing*, not in *guessing*. Dixon's Silica-Graphite paint has been the choice of the knowing ones for over fifty years, and experience has shown that Dixon's has given better protection, for a longer term of years, and at less cost per year of service, than other paints at half the price per gallon.

Furthermore, Dixon's is safe to use, as there are no injurious fumes from it and the pigment is as sweet and pure as charcoal—to which Graphite is twin brother.

The Question

THE question to-day, asked by the man who wants to buy a protective paint, is a double one: "What has the paint done and what will it cost per year of service?" He is looking for service, not first cost, and he wants to know the record and reputation back of the statement.

The history of Dixon's Silica-Graphite Paint covers a period of over fifty years. It has proven its value in all climates and under all trying conditions. Therefore it has a world-wide reputation.

The man who buys it and has it applied properly imposes no burden on his pocketbook and receives the maximum service at the least expense.

It is made in four colors,—olive green, dark red, slate color and black. It is suitable for exposed metalwork of all kinds,—roofs, fences, smokestacks, boiler-fronts, bridges, etc.,—and is equally useful for wood surfaces.

Back of it is the reputation of the Dixon Company, that has been doing a successful business for nearly one hundred years.

Use Dixon's Auto Lubricant

IN shifting gears 'tis always wise
To take no gear by swift surprise;
But gently gauging speed and diction,
Avoid the crash and smash the friction.
For on the hills or on the level
A noisy shift sounds like the devil.

—E. F. O'BRIEN.

"One Every Minute"

WE read of a man of science of New York who also owns a large estate in New Jersey where he carries on interesting experiments.

Several years ago a great lawn fête on his place was one of the leading social events of the season, and he added to the gala aspect of the occasion by dipping the wings of his white leghorn fowls into red, blue, yellow and green dye solutions. They made a great sensation. He said they were Tasmanian Chromokipkips and intimated something about \$50 a dozen for their eggs. Soon he received inquiries for settings with cheques enclosed, and it was only when these were returned and the method of "raising" Tasmanian Chromokipkips was explained that would-be purchasers gave up their quest.

The above is taken from *The Little Journal*, published occasionally by Arthur D. Little, Incorporated, Chemists, Engineers, Managers, Cambridge, Mass.

Guaranteeing Prices

BY this time those manufacturers who fancied that trade could be stimulated by guaranteeing prices against decline doubtless know what they know. They will know more later, when this particular chicken comes home to roost. The idea is fundamentally unsound and financially dangerous. It is an economic "dud" which may explode with disconcerting effects when the spade of orderly trade cultivation accidentally strikes it. It has a time fuse with delayed action—look out for it!

The foregoing is taken from the Bulletin of Regional Associations Co-operating with Paint Manufacturers' Association of the U. S. National Varnish Manufacturers' Association.

Big Words Are Impressive

THE *Literary Digest* tells us that the ability of big words to inspire respect, when the same idea expressed in ordinary terms would fail to impress the hearer, has often been noted.

The label on a brand of clay poultice informs the reader that the marvel is "composed of the finest anhydrous and levigated argillaceous mineral."

These words are considerably more impressive than would be the simple statement that the product is nothing more than a dry and finely powdered clay.

Our attention is also called to another "Professor," a shrewd and genial quack who dispensed a pinch each of salt and sugar in hydrant water, \$5 for two ounces. He did not say it in quite the following, but might have used these words with perfect truth:

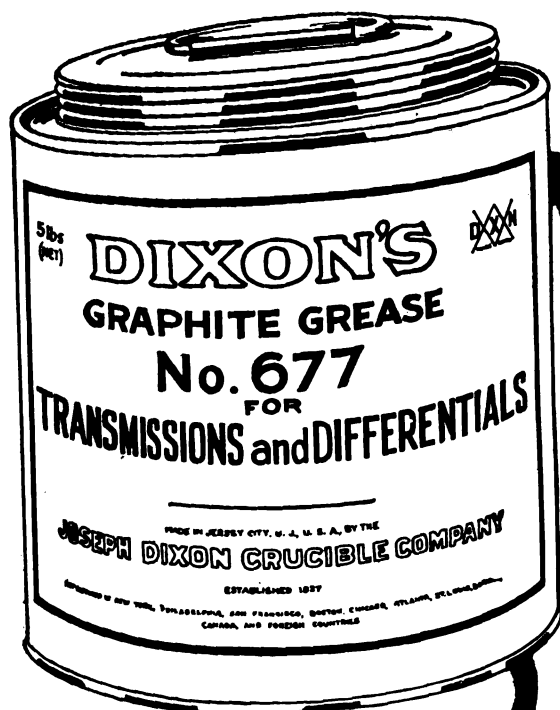
"My preparation is composed of mineral quantities of a member of the disaccharid carbohydrates, derived from the hexoses and capable of yielding two hexose molecules by hydrolysis, having as a general formula $C_{12}H_{22}O_{11}$, and crystallizing in monoclinic prisms, together with an interesting chemical combination of natrium and chlorin, which, in its natural state, forms anhydrous, cubical, or octahedral white crystals. These are dissolved in a colorless, limpid fluid compounded of hydrogen and oxygen."

After the S. A. M. Dinner

LITTLE BOBBIE: "Are you a trained nurse?"

MISS CONRAD: "Yes, Robert, I am a trained nurse."

LITTLE BOBBIE: "Let's see you do some of your tricks."—*Times of Cuba*.



And out in Illinois—

—We have been handling Dixon products for more than twenty years.

The results have been very gratifying to us in increased business, making this one of the big lines, due not only to the effort we have put on it ourselves, but in a very large way to the support that we have had from the factory.

We appreciate very much the policy you have pursued in turning over business to us *that you have solicited*. We find, too, that this introductory work is not local, but we strike a steadily increasing demand from every section of this country as well as foreign countries.

We do not know of any account that has run so smoothly and been so generally satisfactory as the Dixon line.

Yours very truly,
THE BECKLEY-RALSTON CO.
Chicago, Illinois

That letter speaks volumes

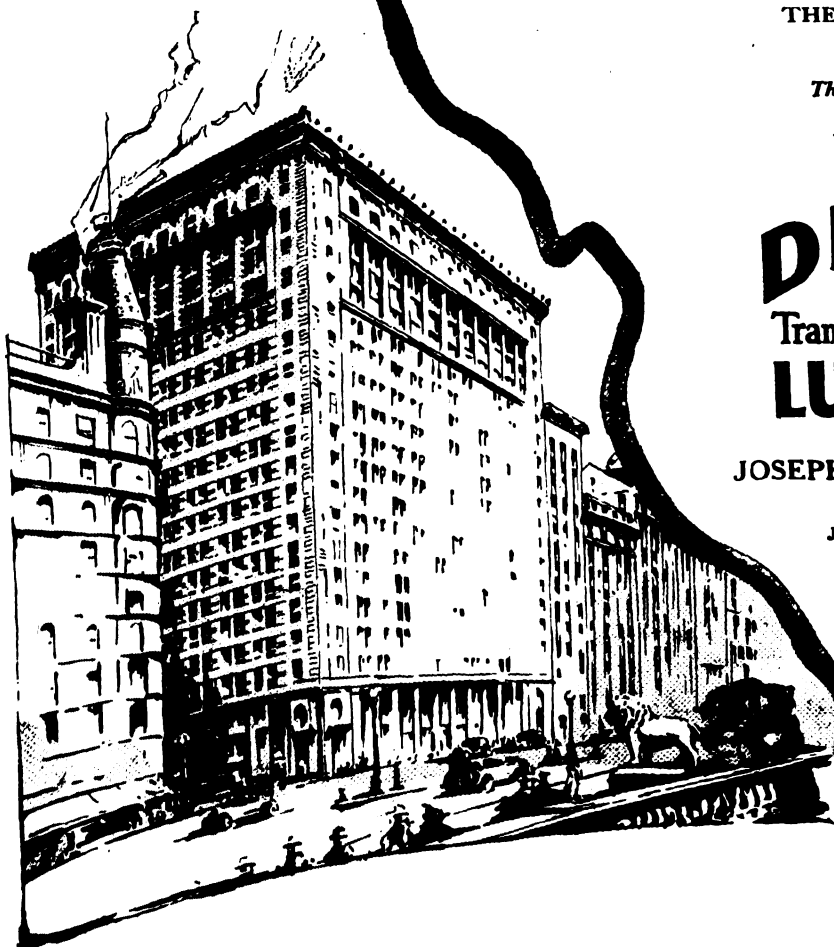
Write for booklet 190-G

DIXON'S
GRAPHITE
Transmission and Differential
LUBRICANT

JOSEPH DIXON CRUCIBLE CO.

Established 1827

JERSEY CITY, NEW JERSEY



THE DE VINNE PRESS
NEW YORK

GENERAL LIBRARY
SEP 11 1919
UNIV OF MICH
Graphite



Scene from Arroyo Seco

10L. XXI.

SEPTEMBER, 1919

*W. H. Sharp
San Antonio, Tex.
18 NO. 9*

JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED 1827 Jersey City, N.J., U.S.A. INCORPORATED 1868

**Miners, Importers and
Manufacturers of Graphite,
Plumbago, Black Lead**

DIRECTORS

GEORGE T. SMITH	GEORGE E. LONG
WILLIAM G. BUMSTED	EDWARD L. YOUNG
J. H. SCHERMERHORN	HARRY DAILEY
ROBT. E. JENNINGS	

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GEORGE T. SMITH	President
GEORGE E. LONG	Vice-President
J. H. SCHERMERHORN	Vice-President
HARRY DAILEY	Secretary
WILLIAM KOESTER	Treasurer
ALBERT NORRIS	Ass't Sec'y & Ass't Treas.

PURCHASING AGENT

JOHN I. McCOMB

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SAN FRANCISCO SALESROOM . . 155 Second Street
PHILADELPHIA OFFICE . . . 801-802 Finance Bldg.
CHICAGO OFFICE . . 1323 to 1327 Monadnock Block
BOSTON OFFICE . . . 347 John Hancock Building
ST. LOUIS OFFICE . . . 501 Victoria Building
BUFFALO OFFICE, 409 Erie County Savings Bank Bldg.
ATLANTA OFFICE 225 Peachtree Street

EUROPEAN AGENTS

Graphite Products, Ltd., 218-220 Queens Road, Battersea, London

SOUTH AMERICAN AGENTS

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS

ALFREDO J. EICHLER, *General Agent*

Agent for Argentine, Uruguay and Paraguay

E. H. Blanchard, 185 Paseo Colon, Buenos Aires

Agent for Brazil

M. V. Powell, Rua Direicta 7, Sala 68, São Paulo, Brazil

CUBAN AGENT

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS

William Croft, Room 424 Lonja del Comercio, Havana

Agent for Porto Rico, Virgin Islands and San Domingo

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS

H. Glyde Gregory, Royal Bank Building, San Juan

LATIN-AMERICAN AGENTS

FOR DIXON'S AMERICAN GRAPHITE PENCILS, ETC.

National Paper and Type Company, 31-35 Burling Slip, N. Y.

With Branch Houses in Mexico, Cuba, Peru, Argentine, Uruguay, Venezuela, Porto Rico and Colombia

CANADIAN AGENTS

FOR DIXON'S AMERICAN GRAPHITE PENCILS, ETC.

A. R. MacDougall & Co., Ltd., 468 King St., West, Toronto, Ontario, Can.

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS

Canadian Asbestos Company, Montreal, Quebec, Can.



The Old Way: 2 Men—2 Days
With Turbine Cleaner, Chisel and Hammer

Go After Scale in the Right Way

A small amount of Dixon's Boiler Graphite every day, and scale removal becomes a simple matter, requiring little time and trouble.

DIXON'S PIONEER BOILER GRAPHITE

Its action is purely mechanical. There is no chemical reaction involved, as is the case with many boiler compounds, and consequently no foaming, deterioration or corroding takes place. The fine graphite flakes mix with the scale as it forms, renders it brittle and prevents it burning fast to the metal. Think of the saving involved in keeping your boiler tubes and drums free from scale, and then investigate Dixon's.

Booklet No. 190-T tells the whole story. Write for it now.

JOSEPH DIXON CRUCIBLE CO.



Jersey City

New Jersey



Established 1827



DURING the War much was written in the warring countries by public men

Our Service Men and Their Dixon Jobs

society. And when we say this we have in mind our own Dixon men, who

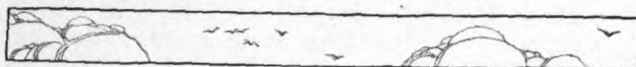
concerning the attitude of the returning sailors and soldiers toward their work in the ensuing peace. Profoundly disquieting were the opinions voiced by many of these writers. Our own country did not lack those who looked with apprehension on what the future held in store for us in the countless individual problems that would arise at the conclusion of the peace. Would Army and Navy life unfit our splendid youth for their place in a peaceful world? Would the discharged men return quietly to their positions in our industrial life, and take up the work which they had left for the business of war? Such questions, it should be said, did not seem to disturb the superb confidence in which the great majority of American citizens, employers and employed alike, held our boys "over in France." And we all know how richly they deserved that confidence. In khaki and blue our friends and relatives have returned. We have shaken their hands. We have cheered them on parade. And we have marked how quickly and quietly, and how as a matter of course, they have laid aside their war-time garb to put on that of the citizen on his peace-time job.

The plain, homely virtues of ordinary men make little stir in the world. Nevertheless, the virtues of such men are the foundations of

passed through the great adventure, and who have returned safely to us. Without fuss, unpretentiously, as men who return from a long trip or from a vacation, they have come back to their jobs. We had told them their jobs would be waiting for them. We are very proud of the manner and the spirit in which they resumed them. It is this spirit which is particularly gratifying to observe: a spirit of alert, willing, absorbed attention in their day's work for Dixon, in the office, in the factory and on the road.

When we wish an example of the unselfish patriot, we call to mind that scene on the plains of Italy wherein we see Cincinnatus ploughing in his fields; we see the messenger from the Roman Senate presenting its command to him to lead the Roman army against the invader; we see the old warrior leave the plough in its furrow; we follow him on his victorious career; and at last we see him refusing a triumph and returning to his plough where he had left it standing in the field.

Ancient Rome fell, but the unselfish devotion of its early sons has become a standard by which to judge men. Judged even by such a standard, our own Dixon men, of whom we are so proud, and in whose safe return we are all so happy, are not found wanting.



"Where's My Pencil?"

How many times have you asked that question? Yet have you ever really found your pencil—one that feels friendly to your hand—that eases and quickens your work? You can find this pencil. Our unusual pencilogue, "Finding Your Pencil," will tell you how. It contains personal information about how to lighten your work by using the correct pencil. Write for it—booklet No. 190-J—today.

**DIXON'S
ELDORADO**
"the master drawing pencil"

Joseph Dixon Crucible Co.
Pencil Department—Jersey City, N.J.
Canadian Distributors
A. R. MacDougall & Co., Ltd., Toronto



The Arroyo Seco

THIS is a tantalizing title. Literally the words mean "dry rivulet." The scene on the cover shows the "arroyo" running over with water; but another sketch, made at another season of the year, would just as faithfully show a dry, stony stream-bed.

The artist writes us from Los Angeles, Cal.:

"I am sending you a sketch from the Arroyo Seco, near here, made with your No. 331, your 'Best' Black—best black is right. I've never used anything for sketching that suited me so well. It's thoroughly responsive, whether for the quiet grays of the distance or the clean-cut accents of the foreground. Have also enjoyed using it for full-size drawings of architectural and other decorative features. It has all the strength and snap of crayon without its smudginess."

The artist is Mr. W. A. Sharp, of Occidental College, Los Angeles.

Dixon's "Best" Black No. 331, with which the sketch was drawn, is as useful in the Industries as in the Arts. For marking papers the teacher likes it; for use on shipping tags the clerks in the shipping department say it "rides alone"; in banks and in pay departments for marking and checking envelopes it is in heavy demand; and it is a first-class marker for leather.

"Graphite" in France

IT is with a great deal of pleasure that we print below a letter that tells of the use of GRAPHITE in France:

"Y. M. C. A. Hut No. 9
Camp No. 4
Bassens, France

"You will be interested to learn that your interesting publication GRAPHITE is being read by our boys in France, to their evident enjoyment. As buyer for the School Department of ———, my name was placed on your mailing list by your school representative. My wife has been sending me the various issues since I came to France last September. After reading it I have placed it in the hut library.

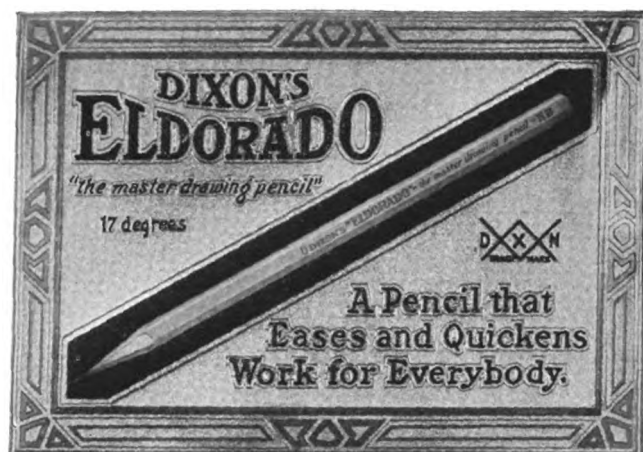
"Until recently 5000 men were quartered in this camp.
J. W. LOVETT, Hut Secretary."

Value of Motor Graphite

WE quote below a letter that illustrates the protective and lubricating value of Dixon's Motor Graphite:

"I am very highly pleased with the results of Dixon's Motor Graphite, after having used it through the intake of the carburetor of my Ford car. I was able to drive the car a distance of eight miles after running out of oil, and all that saved my cylinders was the Motor Graphite. I did not score a cylinder nor pit a piston. I cannot speak highly enough for your Motor Graphite.
G. W. THOMPSON."

We do not advocate this treatment as a steady diet for any motor: oil and graphite must work hand in hand. But the service given by selected flake graphite in an emergency of this nature demonstrates forcibly the protection and service that it gives day after day under normal conditions.



New ELDORADO Steel Sign

A PARTICULARLY attractive successor to the familiar dark blue ELDORADO steel sign, and with the same dimensions, $9\frac{1}{4} \times 6\frac{1}{4}$ inches, is now ready to help build sales for ELDORADO dealers.

The new metal sign, as shown in the illustration, is particularly attractive. The dark blue wording stands out on a bright gilt background which is etched to present a rich, refined and striking appearance. The pencil, as usual, is shown in accurate color; and the new display lines make appeal to pencil users of all classes, technical and commercial.

This handsome steel sign will be promptly mailed to all dealers handling ELDORADO who will drop us a card addressed to Pencil Department, Joseph Dixon Crucible Company, Jersey City, N. J., and asking for the new ELDORADO metal counter sign.

"U. S. Firm Invests Money from Canadian Business in Canadian Bonds"

UNDER this heading, *The Retail Druggist of Canada* has the following article in its August number:

"'Over there' the soldiers of Canada and the men from the States were good friends. The traditional good-will of one for the other was strengthened by the hardships and dangers which were the common lot of those who side by side fought in the good fight. The men who have returned to their homes on both sides of the border are daily bearing willing witness to feelings of admiration and respect for one another which the great conflict fostered.

"'Over here' it is pleasant to recall the ways in which the business men of the two countries assisted one another in the severe demands of the war-time for munitions and foodstuffs. The confidence in Canada manifested by financiers and industrial leaders in the States by their investments in Canadian Government war securities is a chapter in the commercial relations of the two countries which, to treat adequately, should be the subject of an extended review. It is our desire in this short article to refer to one fine example of this confidence in the future of Canada deserving of more than passing notice and approval.

"One of the leading industries of its kind—perhaps the largest of its class in the world—is the Joseph

Dixon Crucible Company, of Jersey City, N. J., U. S. A. It is a graphite house, making a wide line of pencils, crucibles, lubricants and paint. Its Canadian representatives for the pencil line are A. R. MacDougall & Co., Ltd., of Toronto, Canada, and its representative for grease, lubricants and paint is the Canadian Asbestos Co., of Montreal, Canada. It has come to light that the Dixon Company, for the past two years, has invested all its cash returns from sales of its products in Canada in Canadian Government bonds, and in the Provincial and Municipal bonds of the Dominion.

"This is, indeed, showing a full measure of confidence in the future of Canada, for which this strong American house is entitled to a like measure of support in grateful acknowledgment."

Living a Hundred Years

WHEN roads were few and highwaymen many; when men travelled a-horseback or by stage and wagon; when the laws of the land were weak; when opportunity for sale and barter was to be bought and paid for; in such times it was the custom for merchants to pass from one city to another, banded together for each other's protection, showing their goods at what were called "fairs."

To-day, when progress has transformed the situation as we know it, we are seeing a development which reminds us of the ancient custom. What we have in mind at the moment is the Centennial Exposition of the Michigan Drug Company.

Unlike the old "fairs" in many ways, this is most unlike them in one way, because here we have one concern strong and enterprising enough to plan and manage a gathering of the kind solely of its own accord.

A hundred years is a long time. Even for a human being it means a favored constitution and sound living. In a much greater degree what is true of the individual is true of a business organization. Healthy, sound, enterprising and in the front rank after a hundred years, the Michigan Drug Company has our hearty congratulations on its first centennial.

The Dixon Company thought so much of the opportunity offered by this exposition that it had an exhibition at one of the booths. This was in charge of our genial and able representative, Mr. Charles Orth, of the Dixon Chicago Office.

Among many interesting things in his report, Mr. Orth makes one significant observation concerning the scope of the effect of the direct and indirect advertising campaigns conducted by us in the marketing of Dixon's ELDORADO, "the master drawing pencil." We are being continually reminded of our success in this direction, which heartens us in the belief that in one instance we have lifted away "the blue sky" said to be over all advertising, making it an adventure in business calling for singular courage, patience, enterprise and judgment; and, besides these, an extraordinary faith in the existence and growth of effects and forces beyond the ken of the "ordinary business man," and not to be gauged or weighed by him. "The blue sky" is a pretty figure of speech, but here we are not concerned with niceties of language, but rather with a solid accomplishment which has made for the profit and efficiency of Industry and Art in this and other lands,—the making and marketing of Dixon's ELDORADO—"the master drawing pencil."



Andrew Geyer Passes Away

ANDREW GEYER, founder of *Geyer's Stationer*, died at his summer home in Belmar, N. J., on Monday morning, July 28th. His death came suddenly, being caused by acute indigestion, followed by heart failure.

Mr. Geyer was born in Boston, November 25, 1842, and was nearly seventy-seven years old at the time of his death.

His entry into the stationery field was made about sixty years ago, when he entered the employ of Henry F. Marsh.

Seeking a broader field for his activity, Mr. Geyer came to New York and entered the employ of D. Appleton & Co., in the stationery department.

In 1872 he became associated with the staff of the *Paper Trade Journal*, and in 1874, when the *American Stationer* was founded, he became editor of this publication.

Three years afterward he left the *American Stationer* and founded his own publication, *Geyer's Stationer*.

Mr. Geyer was the first secretary of the Stationers' and Publishers' Board of Trade.

He also organized the Stationers' Association of New York, and has always taken the keenest interest in its career. He served as secretary of this Association during one year. At the sixth annual meeting of the New York Stationers' Association, he was elected to honorary membership of that organization.

The Dixon Company feels the loss of Mr. Geyer keenly, as he was a frequent visitor at our offices, and for over forty years had been closely associated in friendship and business with the officials and salesmen of the Company. To his family and the organization of *Geyer's Stationer* go our heartfelt sympathies.

The stationery trade—publishing, manufacturing and wholesale and retail—has lost in Andrew Geyer a friend.

Edwin Hull Crampton

A RETIRED importer died at his home in Brooklyn, N. Y., on August 13th, at the age of 83.

Mr. Crampton was for many years of the firm of Fowler, Crampton & Co., and closely identified with the Joseph Dixon Crucible Company in its importation of graphite. He was always keenly interested in the Dixon Company, of which he was one of the largest stockholders. He never missed an annual meeting if it were possible for him to attend, and at such meetings he delighted to meet and chat with his fellow stockholders and to congratulate the officers on their management. He was an optimistic and helpful co-worker at all times.

Daylight Saving

MUCH discussion took place in legislative circles relative to the Daylight Saving Law. Votes were taken and each side tried to establish its claim.

As much opposition to the law apparently came from farming districts, it may interest our readers if we give a little story of daylight saving so far as the Dixon Company is concerned.

We are indebted to Mr. Thomas Lonergan of Ticonderoga, N. Y., for the facts, and as Mr. Lonergan was connected with the Dixon Company for over thirty years, he is thoroughly conversant with what he has stated.

Mr. Lonergan says that it was some thirty years ago, when the workers at the Dixon graphite mines worked chiefly during the spring and summer months, and it was at that time that they petitioned the Company to set the time ahead in order that they might have daylight to work in their gardens. At their request, the Company set the time ahead one and a half hours, or, in other words, when it was 8:30 P.M. or A.M. by the regular time, it was 10 P.M. or A.M. graphite mine time.

Mr. Lonergan says: "Indeed, I have read the newspaper by daylight at 10 P.M. many an evening, and we boys enjoyed this changing of time as it gave us long daylight after our day's work."

"Later, at the request of the employees, after standard time had been put in force, this time was changed, or placed ahead of standard time, one half hour, this change of time being about the year 1898 or 1899, as near as I can remember."

"However, I do know that the change was made, placing the time one half hour ahead of standard time at the request of the employees of the American Graphite Company, who wished the extra daylight, after the close of the working day, in which to plant their gardens, cut their wood, etc.; and it was the month of May in which the change was made, and also the change was greatly appreciated by the employees and continued up to within the past year or so. However, I do not just remember when the one half hour was cut out and standard time again used, but it was only recently anyway, and I do know that the daylight saving has been appreciated by all the workers who had gardens to plant or had other work to do which they could better do by daylight."

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"LET this be your constant maxim: That no man can be good enough to neglect the rules of prudence."—FIELDING.

BUY WAR SAVINGS STAMPS.



A Wise Stationer

THE stationer who keeps his ELDORADO before the eyes of the public is a wise stationer. Thereby he catches hold of the national advertising campaign on Dixon's ELDORADO, "the master drawing pencil," and makes it draw his wagon along with it.

Our Mr. "Jack" Lewis, District Representative, whose place of residence is Atlanta, Georgia, sends us a bit of proof of the wisdom of one of his good customers, the Mercantile Paper Company, of Montgomery, Alabama, in the matter mentioned. And it gives us pleasure to reproduce above a photograph of a window display of ELDORADO in the place of business of this progressive stationery house, this photograph being the proof referred to. The effective simplicity of this display demonstrates the ability of the window-dresser. From window-displays over-elaborate, from window-dressing over-done, such a window is a good deliverance. And it is noteworthy of the advance which is being made in window trimming that such windows are becoming more in evidence all the time, especially in the stationery trade.

"Some Trip"

The Route that the Dixon Crucibles take to reach their Destination at Santa Cruz, Bolivia

IT may seem rather strange, but it is nevertheless true, that in making shipment of crucibles to Santa Cruz, Bolivia, we make use of the parcel post mail rather than freight. The cost is less and the time and route are also less when sent by mail than when sent by freight.

It requires between two and three months for mail matter to go from New York to Santa Cruz, Bolivia. When sent by freight it usually takes nearly two years.

People generally have no idea of the size of South Amer-

ica. In Brazil alone the United States would find ample room and sufficient space would be left to take in what was formerly the German Empire.

Bolivia is so situated that it has no seaboard of its own, and with its high range of mountains over which all freight must pass on mule-back, one can understand the difficulty of getting freight from the Pacific Ocean into the interior. Santa Cruz is one of the important departments of Bolivia.

As we have already said, shipments of crucibles are made by parcel post from New York. If by freight, the cheapest mode would be to have the goods shipped from New York to Para, Brazil, and from Para, via Amazon and Madeira Rivers, to Porto Velho, Brazil; thence via Madeira and Marmore Railway to Guajara-mirim on the river Marmore; thence, by rivers Marmore and Guapaz, to Las Yuntas; thence, by a fairly good cart road of some ninety or one hundred miles, to Santa Cruz de la Sierra, which is the name in full.

The customer to whom we make shipment of the crucibles came via this route over forty-five years ago, and at that time he walked around the seventeen cataracts in the Madeira and Marmore Rivers.

If one could sit in the office of the Dixon Company for one month and look over the mail as it comes in, bringing orders as it does from every civilized country of the world, and could read the very interesting letters that come along, such as the lengthy one that we have recently received from Mr. Juan S. Bowles, our valued customer in Santa Cruz, one would find that the Dixon Company's business has perhaps even more interest in it than one would get from reading any one of the modern novels.

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THERE is a principle which is a bar against all information and which will keep a man in everlasting ignorance: that principle is contempt prior to investigation.



"STEEPLEJACK" Jack C. Smith, of 1217 Monroe Avenue, Asbury Park, N. J., travels far and high. He has painted all the structures illustrated above with Dixon's Silica-Graphite Paint and many others.

Steeplejack Smith has two good mottos on his letter heading, namely, "Do it now" and "A coat of paint properly applied is insurance against the ravages of time."

The photographs show that this Steeplejack has another standard, namely, Dixon's Silica-Graphite Paint gives best service on water towers, standpipes, smokestacks, and all metal work.

Steeplejack Smith, like Dixon's Silica-Graphite Paint, "goes over the top" on many occasions of service and satisfaction.

Send for Steeplejack Smith, and he will send for Dixon's Silica-Graphite Paint, the old reliable for over 50 years, the longest in service, the lowest priced paint "per year of service."

◆ ◆ ◆

"UNCLE BILL BOTTLETOP recovered from the grip very quickly."

"Yes. He got well just as soon as the doctor told him he could go on taking the quinine and cut out the whisky."
—*Washington Star*.

THERE are two kinds of dollars—one that is never worth more than a hundred cents, and one that grows in value. When you put your money in War Savings Stamps you change your hundred-cent dollars into the kind that grow.

Buy War Savings Stamps.

The Care of Farm Tractors

FOR the best results in the use of a tractor on a given farm, many factors are involved, among which are proper design and construction, adaptability to the work to be done, and proper operation and care.

Many of the calls for a service man for tractors are for minor troubles which the operator could fix himself if he knew what to do, and others are for more serious trouble which could have been prevented by proper handling.

Farmers buying their first tractor seldom realize the hard work a tractor engine is doing. One objected to draining the oil out of the crank case every week (as recommended by the manufacturer) as an unnecessary expense. He admitted that he drained the oil out of the crank case of his auto every 1000 miles. He did not realize that in a week the tractor engine runs as many hours as the auto engine would in going the 1000 miles, and the tractor engine is working under almost full load all the time.

When the United States Army started to motorize its artillery by using tractors and trucks, it was recognized at once that the personnel would have to be trained to secure the best results from the new equipment. This led to the establishment of schools for officers and men where the design and construction as well as the operation of the machines could be studied under the varying conditions that they would be likely to meet.

Lack of lubrication is a common cause of tractor "shut-downs." Instruction books all contain information about the proper attention to give the various parts, but it is easy to forget or overlook some grease cup or oil hole until overheating or breakage furnishes a sudden reminder.

A chart can be ruled up which will be a great aid in preventing neglect and carelessness. On the left is listed every part of the machine requiring attention, and the quantity and kind of lubricant to use. The rest of the chart is ruled into squares, one for each day of the month. Whenever a part should be lubricated a circle is drawn in the square for the proper date. The man doing the work puts his initials in the circle, showing that the work has been done.

We are indebted to the *Chilton Tractor Journal* for the above and it fully expresses our thought.

Realizing the importance of properly lubricating the various parts of tractors, we have prepared a "Tractioneer's Guide," which indicates the lubricant that has been found best for each part of all well known machines. Copies are free to all interested in keeping tractors off the scrap-heap. Ask for Booklet No. 190-GT.

Welcome to the Dixon Booth, at the Convention of Foundrymen

THE Twenty-fourth Annual Convention of the American Foundrymen's Association will be held in Philadelphia from September 29th to October 3d, inclusive, at the Commercial Museum on 34th Street, below Spruce, in the Exhibition Hall.

The Dixon Booth will be Space No. 18, just as you enter the Exhibition Hall, and will contain a display of Dixon Crucibles, both standard shape and tilting furnace styles, stirrers, sand pots, muffles, etc., etc.

If you take in this convention, be sure to make the Dixon Booth your headquarters, meet your friends, and talk over happenings in the metal trade since you met last year in Milwaukee.

The Dixon representatives will be glad to see you.

A Cure for Overheated Bearings of Locomotives

DECADES ago when the astronomers began the development of their telescopes they were surprised by the fact that in all directions stars and suns were to be found. As the opticians improved the instruments and the technique of observers increased, nothing has been found to disprove this theory of continuity. The mathematicians also developed series and by far the greater number were continuous functions. With the discovery of radium and Roentgen rays it will not be many generations before the stand-by of many chemists, the discontinuity of matter, is shattered.

Nor are continuous functions confined to academic walls, for we also find them in railway engineering. There we notice that as the temperature of the air increases during the summer months, the wear and tear on equipment increases. This is caused not only by the rise of temperature, but also by increased traffic and chiefly from the hard sand particles lodging in the bearings. These cause cutting and also overheating.

With water pipes leading to heated bearings it is a simple matter to flood the parts if the overheating is not too great. In spite of its apparent massiveness a locomotive is indeed a very finely adjusted and delicate machine, and temperature changes are sufficient to start considerable trouble. If the heating is in the driving box there is a great probability of the driving box binding in the wedge. With the non-adjusting wedges, the engineer should slightly loosen the wedge and again reset it when the temperature has become normal. The self-adjusting wedge which has been placed on most of the newer and high-powered locomotives overcomes this difficulty, and the possibility of trouble is reduced to a great extent.

If the rod brasses are subject to overheating the danger is much greater, because of the ease with which the babbitt bearings melt, although no sign is visible to the engineer. The best thing to do is to continue until the babbitt has melted out. If an attempt at cooling is made while the babbitt is melting, the oil holes close and the bearing sets so that the work to be done in rebabbiting is doubled.

The eccentric strap of the Stephenson valve gear is another frequent source of trouble. Since it is of cast iron, the danger is much greater, because sudden cooling of cast iron is disastrous. By slacking up on the bolts, the strap is allowed sufficient play so that friction and heating is reduced.

It is well enough to discuss methods of relieving bad conditions, but it is far better to remove the cause. This is most readily done by correct and suitable lubricants. A lubricant which answers this purpose must be one which has several distinctive features. It must withstand considerable pressure without squeezing out. It must have

a low coefficient of friction. It should be of such a nature as to protect the moving parts from cutting. This is to be had in the new Dixon Graphite Hub Liner Grease. It will not squeeze out, but instead coats the parts with a tough veneer of graphite so that the moving parts work on two surfaces of graphite with its very small coefficient of friction. Because of these properties, bearings will not overheat, neither will they wear. For lubricating Shoes, Wedges, King Plates, Hub Liners, etc., it is without equal.

We are not theorizing on these things, for it has been our good fortune to prove this to some of the larger eastern

roads. These tests were carried out on locomotives of several kinds: new ones just from the makers; some with Hub Liners and Shoes just cut a trifle; and some very badly. At the end of the tests the results were that no cutting had taken place on the new ones and the cuts on the others had been completely built up with the graphite coating, and no wear was visible.

We want all railroad men to know of this product, and a line dropped to Dept. 190-HR will bring you a sample and a booklet with directions.

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"ONE of the best rules in conversation is never to say a thing which any of the company can reasonably wish we had rather left unsaid; nor can there be anything more contrary to the ends for which people meet together than to part unsatisfied with each other or themselves."—SWIFT.

LINES TO A PENCIL

I know not where thou art.
I only know
That thou wert on my desk,
Peaceful and contented,
A moment back,
And as I turned my head
To light a pill,
Some heartless wretch
Went south with thee.
I know not who he was,
Nor shall I investigate.
Perchance
It may have been
The guy I stole thee from.

—Selected.

Dixon's Silica-Graphite Paint, Thick-Ground-in-Oil

CHANGING conditions and the advancing cost of linseed oil oblige us once more to put Dixon's Thick-Ground-in-Oil Paint on the market.

Paint business throughout the entire United States has largely increased because municipalities and corporations as well as individuals put off the time of painting as long as they could, and now find themselves obliged to repaint.

The price of linseed oil to-day is \$2.24 per gallon in car-load lots, and it is said that the probability is that it will go to \$3.00 per gallon.

The crops in the United States have failed to come up to expectation, and the Argentine linseed is going to Europe for two reasons: one is because they have the boats, and the second reason is that the buyers got ahead of the North American buyers.

Dixon's Silica-Graphite Paint in paste form will be a linseed oil paint. Buyers will have the option to thin it with strictly pure linseed oil, raw or boiled, or to use part linseed and part other oils. In other words, it will be up to the buyer to use whatever vehicle he sees fit, and the Dixon Company will be held responsible only for the paint as it is in paste form. If buyers want straight goods, then they must order Dixon's ready-mixed paint.

"A JOB FOR EVERY STAR"

THE boys are coming back, and in accordance with the promise made to them by President George T. Smith when they entered the United States Service, they are being assigned to a position at least as good as that which they left. The following have returned up to the present:

RALPH ALFONSO, *Depot Brigade, Color and Lead Department.*
B. C. AREY, *Field Artillery, Boston District Office.*
H. W. ARMSTRONG, *Regimental Sgt.-Major, 312th Infantry, A.E.F., Crucible Department.*

LOUIS ARNOLD, *113th Infantry, A.E.F., Driver.*

EDWARD E. BACKUS, *335th Field Artillery, Crucible Factory Office.*

FRED BIRK, *3rd Chemical Battalion, Laboratory.*

G. H. BOWLEY, *Naval Reserve, Pencil Department.*

GEO. E. BROWN, *113th Infantry, Crucible Factory.*

C. A. BRUNGER, *Ordnance Sergeant, A.E.F., Auto Lub. Sales Department.*

WARREN BUDD, *S.A.T.C., Columbia University, Pencil Department.*

WILLIAM P. S. BURRELL, *Motor Transport Corps, Advertising Department.*

F. W. CASSEY, *Sergeant, 104th Field Signal Battalion, A.E.F., Accounting Department.*

JOHN CONKLIN, *113th Infantry, A.E.F., Driver.*

H. N. COONS, *Co. A, 53rd Infantry, A.E.F., Pencil Sales Department.*

H. A. CORDES, *20th Engineers, A.E.F., Crucible Factory.*

FRANK CYWINISKI, *5th Battalion, Aberdeen Proving Grounds, Crucible Factory.*

STEFEN DUBNOWSKI, *606th Engineers, Color and Lead Department.*

HARRY D. ERICKSON, *14th Engineers (Light Railway), Traffic Department.*

THOMAS EVANS, *16th Infantry Battalion, Pencil Factory.*

MICHAEL FALLON, *347th Regiment, A.E.F., Crucible Factory.*

JOHN FARGO, *334th Field Artillery, Pencil Factory.*

ANDREW FESTA, *Camp Humphreys, Color and Lead Department.*

CARMINE FROMLARA, *304th Engineers, A.E.F., Pencil Factory.*

JOSEPH GREEN, *18th Casual Aircraft Armor Company, Machinist.*

BEN GREENE, *811th Infantry, A.E.F., Grease Factory.*

TONY GREY, *153rd Depot Brigade, U.S.A., Crucible Factory.*

WM. J. HAMILTON, *Sgt.-Major, Engineers' Corps, Credit Department.*

GEORGE HEATHER, *47th Infantry, Color and Lead Factory.*

H. L. HEWSON, *Lieut., U. S. Navy, Railroad Department.*

JOSEPH HUMMILL, *Ordnance Dept., Headquarters Co., Driver.*

WILLIAM KIRCHNER, *59th Pioneer Infantry, A.E.F., Color and Lead Department.*

ANTONIO LESMAN, *1st Gas Regiment, U.S.A., Crucible Factory.*

THOMAS A. MCCRYSTAL, *U. S. Navy, Grease Factory.*

NORMAN McDONALD, *Royal Flying Corps, Brass Factory.*

WILLIAM MCFADDEN, *104th Engrs. Corps, Crucible Sales Department.*

JAMES MENTOR, *807th Infantry, A.E.F., Grease Factory.*

DANIEL MITCHELL, *310th Infantry, A.E.F., Pencil Packing Department.*

J. J. MONAHAN, *Hdq. Co., 346th Infantry, Auto. Lub. Sales Department.*

THOMAS A. MOORE, *S.A.T.C., Fordham University, Cost Accounting Department.*

DENNIS O'LEARY, *59th Pioneer Infantry, A.E.F., Pencil Factory.*

VINCENT PETRIE, *U. S. Navy, Cost Accounting Department.*

HARVEY RAGAN, *U. S. Navy, Lubricating Sales Department.*

ANDREW RODACK, *Aircraft Battery (67th), Color and Lead Department.*

JOHN O. ROLLINS, *U. S. Navy, Purchasing Department.*

LAWRENCE W. ROUSH, *1st Lieut., 78th Field Artillery, A.E.F., San Francisco Sales Office.*

EDWIN A. SELL, *Sergeant, 33rd Engineers, A.E.F., Pencil Sales Department.*

H. P. SMITH, *2nd Lieut., 3rd Field Artillery, A.E.F., Lubricant Sales Department.*

FRANK SPINELLO, *3rd Engrs.' Training Regiment, Driver.*

HENRY STEFFENS, *3rd Engrs.' Training Regiment, Cost Accounting Department.*

JOHN F. STIER, *336th Machine Gun Battalion, Pencil Factory.*

WILLIAM SULLIVAN, *347th Infantry, A.E.F., Color and Lead Department.*

A. K. SUTTON, *Machinists' Mate, Naval Aviation, Auto Lub. Sales Department.*

ANGELO VERTUCCI, *Pencil Factory.*

R. B. VINCENT, *Gas Defense Division, Philadelphia District Office.*

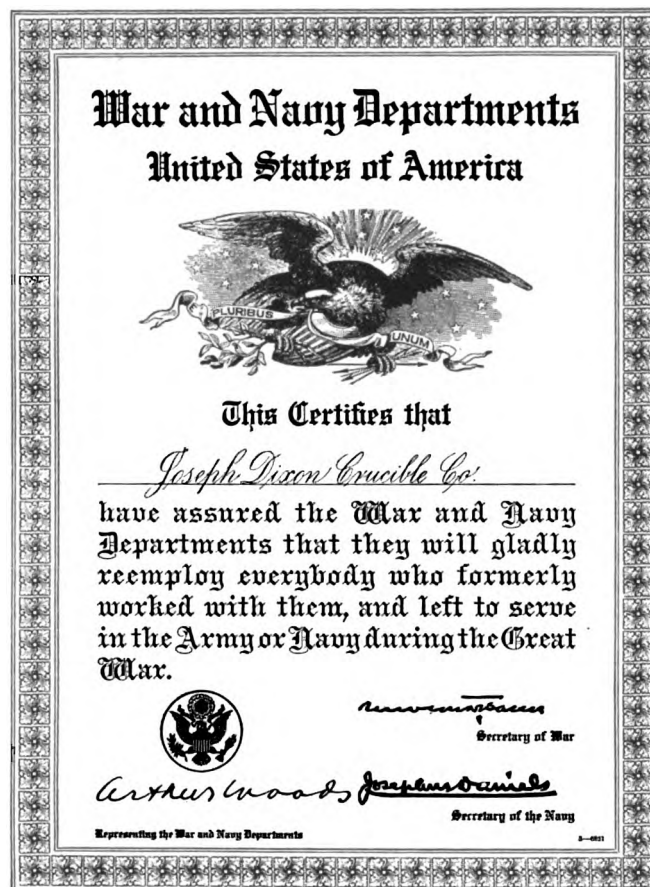
SAM VITALI, *158th Infantry, Pencil Factory.*

WM. J. WARD, *113th Infantry, Crucible Factory.*

JOSEPH WHITLEY, *113th Infantry, A.E.F., Cost Department.*

THOMAS WILSON, *47th Battalion, United States Guards, Brass Factory.*

DAVID YOUNG, *Ordnance Department, Cost Department.*



(Reproduction of original awarded by the War and Navy Departments)

Conventions

THE following from *Life* is printed without permission, but it is so good and so timely that we trust *Life* will forgive us. We know it will be specially appreciated by many a poor devil of a treasurer and general manager, and while it may raise a laugh it may also put wise some who attend conventions and who seem to have an idea there is no bottom to the bosses' pocket-books:

"At conventions men kill time and murder expense accounts; get the latest stories for the benefit of the boys back home; exchange experiences and drinks, mainly the latter; wonder what it is they are meeting about, and become more confused as time goes on; make a speech so that their names will be included in the convention report; knock the other speeches; become horribly bored, terribly tired and palpably indifferent; return to tell the general manager of the company that it was by far the most inspiring convention they ever attended, and that they would not have missed it for worlds."

We Are Known by Our Loving Friends

KNOXVILLE BRASS & METAL WORKS,
KNOXVILLE, TENN.,
July 12, 1919.

Joseph Dixon Crucible Co.,
Jersey City, N. J.

Dear Sirs:

We have been using your crucibles for about four years and have found them to be far superior to any other crucible we have ever had.

During this time our business relations with your Company have been very satisfactory, and we beg to say that no crucible user could go wrong in giving you his business in this line.

Yours truly,

KNOXVILLE BRASS & METAL WORKS,
(Signed) Geo. L. Morris,
Manager.

Omsk Poetry!

THERE was a wise painter in Omsk,
Who won his "low costs" in a rompsk;
He always used Dixon
When his paint he was fixin';
The man who looked on came from Tomsk!
He took the good habit from Omsk;
His neighbors came over from Yomsk;
From Rosco to Bosco,
To the Tolstoys in Moscow,
They're all using Dixon's, like Tomsk!

A Real Remedy

A SOLDIER went to a "quack" doctor and complained of a sharp pain after sitting on damp grass for some hours, during which he had frequently sucked the point of a lead pencil. The "quack" told him that he was suffering from "plumbism" and gave him some pills. The next day he returned to the "quack" and said, "You told me I had 'plumbism,' which is lead poisoning, and I now find there is no lead in lead pencils, only graphite or plumbago." "Oh!" replied the "quack" airily. "Did I say plumbism is the cause of your plumbism? I meant to have said plumbago is the cause of your lumbago." "Oh!" said the man. "But, anyhow, your pills are only bread!" "Of course!" replied the "quack." "Don't you know that bread is the finest thing to remove pencil marks with? You didn't want me to give you India-rubber pills, did you?"—*San Francisco Call*.

◆ ◆ ◆

THERE were conscientious objectors to military service and there are conscientious men who do not believe either in advertising or in foreign trade, yet the 2000 delegates at the Sixth Annual Trade Convention at Chicago last April, representing all sections of the country and every phase of its productive, commercial and financial life, summed up their deliberations with the statement that the development of foreign trade is essential to American industry.

Chairman James A. Farrell laid stress on the changed conditions wrought by the war in both belligerent and neutral countries and the special significance to American producers and merchants.

The nation must, like the manufacturer and the merchant, advertise and push forward if it is to become well known and to grow and become prosperous.

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THE Savings Institution of the United States Treasury Department tells us that if we will only put aside \$1 a week and invest it in War Savings Stamps at 4% interest compounded quarterly, we will have from that weekly dollar investment \$68,620.89 at the end of one hundred years.

If you can't start this for yourself, start it for your children, as there is many a child who ought to live one hundred years at least, in these days of no booze and perhaps no tobacco and no other health-destroying vices.

Export Trade

THE following is a quotation from a speech made by Mr. George Ed. Smith, at the Convention of the Chamber of Commerce of the United States, in St. Louis.

"America's export trade is no longer the sole concern of the exporter. It is the concern of all who wish to see America's progress continue. The manufacturer, no less than the export house, the retail merchant no less than the manufacturer, has an interest in the development of our foreign commerce. The workman who builds a machine has as much interest in our foreign market as has the sailor who carries that machine to the foreign port where it is needed.

"The dollar that comes from the sale of American goods abroad means infinitely more than the small margin of profit which accrues to the exporter who makes the sale. To the shipowner it means added cargo and return on his investment. To the manufacturer it means increased volume and smaller overhead. To the foreman and mechanic it means steady employment in spite of slack domestic seasons. To the local merchant it means the new business which a prosperous community offers. To each and every one it spells profit, employment and progress."

A Rather "Nutty" Episode

WILLIAM FEHRMAN, manager of a local ten-cent store, hired Miss Lily White, graduate of an efficiency school, to assist in inventorying.

"Lily had had little experience but a lot of enthusiasm. So down to the basement Bill marched the new clerk.

"Everything in the place had to be counted, Fehrman said, with a sweep of his hand, and he added that the number of articles must be put down on paper.

"Two days later Bill asked his assistant what had become of the new girl. The assistant didn't know, so Fehrman started a search. He found her in a far corner of the basement where there were several barrels of peanuts.

"She was starting on the second barrel.

" 'There were 17,982 peanuts in the first barrel, Mr. Fehrman,' said the industrious young woman."—*Exchange*.

Erasers that Erase

It's the thin edge,

which takes out the smallest typewritten error without smearing the remainder, that makes this the favorite eraser of typists,—

DIXON'S DISC No. 899. Just ask your stationer for No. 899 Eraser.



◆ ◆ ◆

"Eclipse is first

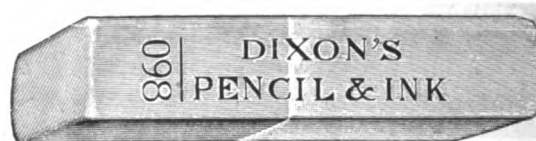
and there is no second,"—which just about sums up the result of a test of erasers for pencil marks made recently by one of America's big railway systems. Standardize your pencil erasers by calling for Eclipse (red) No. 868.



◆ ◆ ◆

"That's a fine combination!"

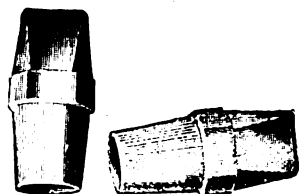
is sure to be your judgment of Dixon's No. 860, for pencil, ink and typewriter marks. One half is of the same red material as No. 868, and the other of an equally standard composition for erasing ink and typewriter marks. You may go from pencil to ink to typewriter erasure, speedily and without smudge, with Dixon's No. 860.



◆ ◆ ◆

Tip your pencil yourself

with Dixon's Wedge Eraser Tip Pat. 450. Holds your pencil in your pocket, anchors it on your desk, outlasts many tips of ordinary size, and does quicker, cleaner erasure all the while. This is a tip for the busy business man, architect, engineer and artist—Dixon's 450 Wedge.



Dixon makes many other styles of erasers. You should send for "The First Five," a trustworthy guide in Eraserdom

Joseph Dixon Crucible Company

Pencil Dept. No. 190-EJ.

Jersey City, N. J.



Established 1827



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Graphite

PUBLISHED BY THE
JOSEPH DIXON CRUCIBLE COMPANY, JERSEY CITY, N. J.



VOL. XXI OCTOBER, 1919 No. 10



Pumping Station,
Water Works Dept.,
Kalispell, Mont.

JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED 1827 Jersey City, N.J., U.S.A. INCORPORATED 1868

 **Miners, Importers and
Manufacturers of Graphite,
Plumbago, Black Lead** 

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*With Branch Houses in Mexico, Cuba, Peru, Argentine,
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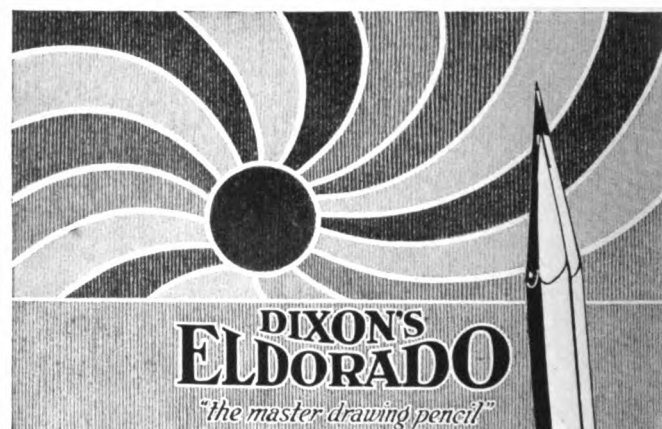
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FOR DIXON'S AMERICAN GRAPHITE PENCILS, ETC.

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FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS

Canadian Asbestos Company, Montreal, Quebec, Can.



Eases and Quickens Writing

No matter how heavy or light your hand—whether you are artist, writer, accountant, draftsman, teacher, student or clerk you will find *your* pencil among the 17 perfect leads of Dixon's Eldorado. The long wearing delightfully smooth and rapid gliding leads will ease and quicken your work and make for genuine pencil economy.

Made in **17 LEADS**
*one for every need
or preference - -*

6B (softest) to 9H (hardest), HB (medium) for general use. Get a trial dozen from your dealer, or send 10c for our grade chart and a full-length pencil. Please mention dealer's name and whether soft, medium, hard or very hard lead is desired.

JOSEPH DIXON CRUCIBLE CO.

Established 1827

Dept. 190-J,

JERSEY CITY, N. J.



Canadian Distributors
A. R. MacDOUGALL & CO., Ltd.
Toronto, Ont.



*There is a Dixon-quality Pencil, Crayon, and
Eraser for every purpose*



THERE are
paints and
paints. There
are paints of
various kinds.

The demand is greater than any one manu-
facturer can supply.

The Dixon Company manufactures a
paint. It is a silica-graphite paint. We
could make a straight graphite paint, as we
have graphite of all kinds; but experience,
during the past fifty years and longer, has
demonstrated that a graphite paint for pro-
tective purposes requires an alloy, the same
as a gold chain, or, for that matter, a
gold coin; otherwise the wear is exces-
sive.

Therefore we make a silica-graphite
paint which is Nature's union of the flake
silica and graphite. It is mined at the
Ticonderoga, N. Y., mines.

Not seeking all the graphite paint busi-
ness, we manufacture only *one quality*.
You can buy a straight graphite paint;
you can buy a graphite paint in which

A Matter of Paint

When Considered for Durability and
Preservation of Metal or Wood Surfaces

the oil vehicle
is question-
able; you can
buy some
graphite paint

at so low a price that we do not wonder you
are sometimes tempted if you consider
"price per gallon" *only*.

The Dixon Company does *not* manufac-
ture such paints. We manufacture *one*
quality only, the very highest, wherein
we use only Dixon's silica-graphite and the
best oil vehicle obtainable.

If you require a paint that will give you
the lowest cost per year of service, you
should use Dixon's Paint. It will pay you
to do so if you seek lowest yearly charges in
your cost account.

Cheap paints are like sprinters in a race—
good for short runs only. The lowest price
per gallon paint is even up for a time, but
Dixon's Silica-Graphite Paint wins out in
the long run, because it has durability. The
lowest price "per gallon" paint runs a short
race.



Plant, Furbush & Co., Charlestown, Mass.

THIS smokestack was painted over two years ago with Dixon's Silica-Graphite Paint.

As the photograph shows, the stack is still well protected. Dixon's Paint stands up against severe service conditions, such as heat, sea air, dampness, gases, winter storms, etc., for longer periods than any other protective paint. Here is proof positive.

It would be the most economical paint to use even if its price "per gallon" were twice or thrice the amount that is charged. Those who buy a paint by the "per gallon" price and not the "yearly cost," do not buy in the most economical way.

Do Your Best

THIS country raised twenty billions or so for war because each and every John Smith felt that the war would be lost if he, John Smith, did not dig deep in his pocket and do his best work in every way.

We fed Europe because each American, on going to his meals, found his conscience on his plate.

If each and every executive and officer, every superintendent and head of department, every salesman and worker, would give the best that is in him, and all of it, to the work for which he draws his salary or pay, there would be fewer moribund concerns and less back-slipping in business.

It is not Government ownership, or paternalism in corporations or business, that will bring the highest social welfare or develop the greatest efficiency. It is individualism, —individual effort coupled with vision of a reward for effort, whether that reward is a day's pay, or a year's salary, or a great crop, or a structure, or whatever the vision may be.



Plant F, American Manganese Steel Co., Oakland, Cal.

THIS building is 80 by 260 feet, and is equipped with 5-ton and 10-ton electric traveling cranes.

H. P. Hoyt & Company were the engineers and contractors. Cyclops Iron Works installed the electric cranes, and S. T. Johnson & Company the oil-burning apparatus for the ovens. Building erected at a cost of \$500,000.

The intricate structural steelwork is protected with Dixon's Silica-Graphite Paint. It pays to use the longest-lasting paint on such costly work as this, where the time of the painter comes high on such a rib-like structure.

Dixon's Silica-Graphite Paint is more easily applied to the intricate steelwork, and this saves in labor charges. Ease of application and long life are the two points that win for Dixon's Paint. It is made in *first quality* only, which is a satisfying guarantee to purchaser.

These are days of high costs, inferior commodities, substitutes, etc. Therefore choose the old reliable of over fifty years' record, Dixon's Silica-Graphite Paint, known the world over.

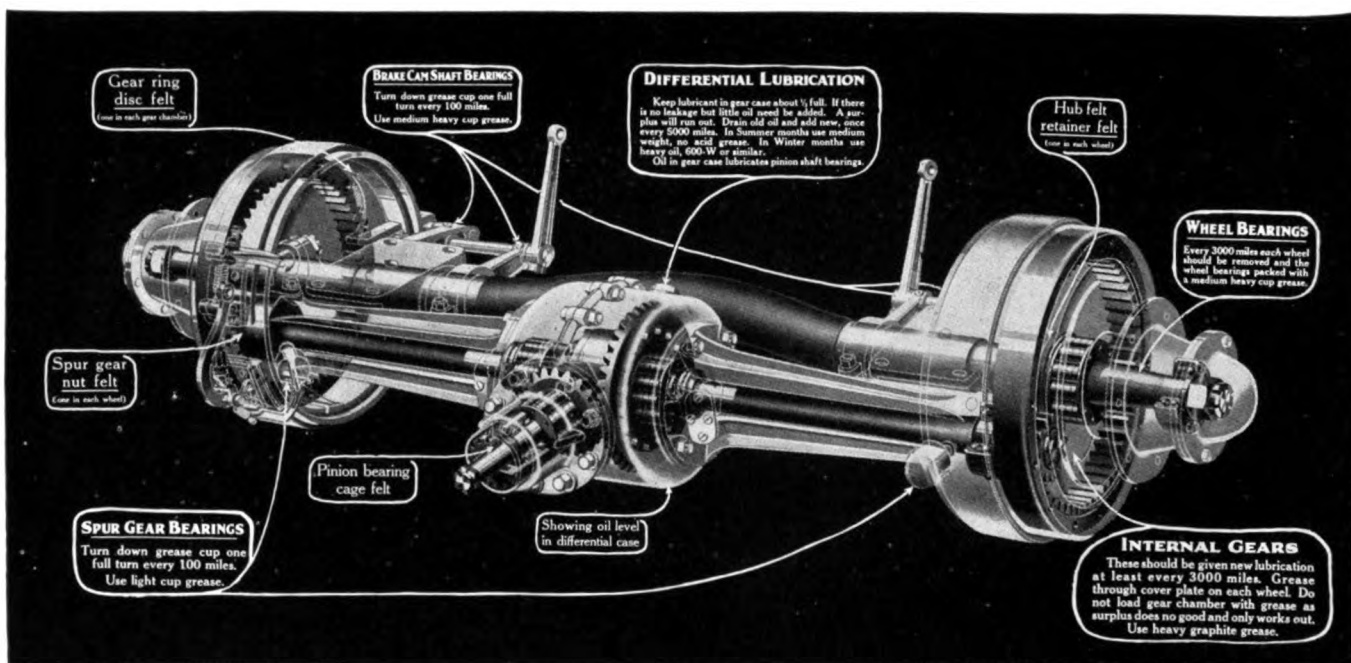
Pumping Station, Waterworks Department, Kalispell, Mont.

WH. LAWRENCE, Superintendent of the Waterworks Department, Kalispell, Mont., uses Dixon's Silica-Graphite Paint on the water plant under his charge, and is so well pleased with its service that he passes the valuable testimony of his experience on to others.

Our cover shows the smokestack of the power plant at Kalispell, which, together with the boiler fronts, was painted two years ago with Dixon's Silica-Graphite Paint, and, to quote Mr. Lawrence, "the paint is still in the pink of condition."

When men of Mr. Lawrence's reputation in the waterworks utilities say that Dixon's Silica-Graphite Paint is the "best in service and economy," that is reliable testimony, "proof positive," gleaned from convincing experience.

Dixon's Silica-Graphite Paint is standard among water companies for use on standpipes, tanks, towers, smokestacks, boiler-room equipment, etc. Silica-Graphite is as pure and sweet as charcoal, and does not affect or harm potable water. In long service, yearly economy, ease of application, and standard *first quality*, Dixon's Silica-Graphite Paint is unrivaled.



Clark Shows Users How to Care for Axles

ADEQUATE care and proper lubrication are as essential to the efficiency of a motor truck as is gasoline, and add longevity to efficiency. Although a good motor truck will run many miles without any more attention than giving it gasoline and water, it will not run smoothly and efficiently very long with treatment of that kind. Much of the trouble which develops after a truck has seen only slight service is usually the result of a lack of proper knowledge or carelessness on the driver's part.

It is with the idea of reducing this trouble to the minimum that the Clark Equipment Co., Buchanan, Mich., manufacturers of Clark Internal Gear Drive Axles for trucks, has prepared a phantom drawing that graphically illustrates the mechanism of the axle and shows its construction in detail. It is reproduced on a scale sufficiently large to make all parts clearly understood. The chart is tinted to show the parts to be lubricated, and the quantity of oil or grease to be kept in the chambers and bearings. Notations indicate the kind of lubricants recommended and the frequency with which they should be renewed.

The Clark Equipment Co. will gladly mail to every user of a Clark Axle upon request a copy of this drawing, together with an instruction sheet regarding care and oiling. The illustration on the chart is typical of all Clark Axle models.

Dixon's Non-Leak Graphite Grease No. 680 is recommended by the Clark Equipment Co. for the lubrication of the internal gears. This grease admirably meets the requirements. It clings to the gear teeth, and, if applied sparingly, does not work out of the casings to attract dirt. The wheel spindles should be lubricated with a high grade cup grease, such as Dixon's Graphite Cup Grease No. 3, while Dixon's Graphite Grease No. 677 affords maximum protection for the differential gears in summer as well as in winter.

◆ ◆ ◆

Don't wait to get that large sum for investment. Put all the little bits in Thrift Stamps and War Savings Stamps and you will soon have a large sum invested.

Bridge, Virginia & Truckee Railway Company, Carson City, Nev.

Twelve Years' Paint Service

OF course this service was with Dixon's Silica-Graphite Paint, the *longest service* paint.

The Virginia & Truckee Railway Company of Carson City, Nev., has a steel bridge near Reno that was painted about twelve years ago with Dixon's Paint, and is still in such good condition that repainting is not contemplated for two years more.

Reno is years apart in two things—longest service of Dixon's on bridges, and shortest life of marriages, for Reno is divorce headquarters for the U. S. A. No engineer who is wedded to Dixon's Silica-Graphite Paint has had to break the bonds; in fact, he confirms them at long intervals, like silver weddings.

Dixon's Silica-Graphite Paint is no experiment. It is an established institution.

Science Makes Old Pine Stumps Profitable

IN old days the ordinary man tapped the Florida pine tree and from the sap secured resin and turpentine—those two, and only those two, products.

Now, the scientific man comes along and from the old stump wood gathered from the extensive areas cut over years ago secures a number of commercial products.

In the destructive distillation process the old pine wood is reduced to charcoal in modern steel retorts. The product contains no less than fifty-four definite chemical compounds.

Some of these rare compounds are extracted for use in the manufacturing industry.

In the old days when the live trees were tapped for the sap, the trees soon died and then were cut down by the lumbermen for the pine wood, and now there comes along the scientific man who takes the old stumps that were considered absolutely worthless and from them obtains valuable products.



East Street Viaduct, San Francisco, Cal.

THE viaduct illustrated above was erected by the California State Board of Harbor Commissioners. It contains about 175 tons of steel. The contractors were the Ralston Iron Works. The steelwork contained in this structure is painted with Dixon's Silica-Graphite Paint, olive green.

The view shown is one of the busiest spots in the United States, and is a place that many a globe-trotter will recognize.

All of the piers along the water-front are also protected with Dixon's Silica-Graphite Paint.

The handsome electroliers owned by the Pacific Gas & Electric Company shown in the picture are also painted with Dixon's Paint.

The "Sons of the Golden West" are proud of their famous city, and we Easterners are equally proud of our East.

When you go to San Francisco, look around not only for beauty but for service, and part of that service is rendered by Dixon's Silica-Graphite Paint.



Strong Steel Foundry Company, Buffalo, N. Y.

THIS well-known company is one of the largest and most widely known concerns manufacturing steel castings. The building was fabricated by the Lackawanna Bridge Company, and the steelwork involved is protected

with Dixon's Silica-Graphite Paint,—standard protective paint for highest quality and longest service.

Architects, engineers, and others specify and use Dixon's because of its reliability and lowest cost per year of service. It is the great saver of LABOR charges in the paint field. Therefore insist upon Dixon's Silica-Graphite Paint and accept no other.

Dixon's Electrotyping Graphite

ELECTROTYPING is a process by means of which any number of duplicates may be produced from the printing face of the original type or engraving.

It consists of making an impression of the original object in wax and making the surface of this wax impression electrically conductive so that a shell of copper or nickel may be deposited upon the face of the wax by means of an electrolytic bath. By melting away the wax from the shell and finally reinforcing the shell with type metal, a more or less perfect reproduction of the original is obtained.

There are two operations in this process that would be physically impossible without the use of graphite. One is making the impression on wax, and the other is making the surface of the wax electrically conductive. These operations are known as "Molding" and "Polishing."

Molding:—A wax "case" is prepared by flowing melted wax upon a warmed metal slab. The layer of wax is cooled, shaved to a uniform thickness, and then is slightly softened by warming. It is then brushed over thoroughly with molding graphite and laid upon the original, which has also been brushed with molding lead. The two are then placed in a powerful hydraulic press and a pressure of upwards of 3000 pounds per square inch is applied. The wax case is then lifted from the original. If the graphite and other conditions are right, a sharp, clean and deep impression is obtained in the wax. Inasmuch as part of the graphite which was brushed on the case before pressing remains on the case and part remains on the original, that part remaining on the original represents just so much lost detail, so it is plain that the wax impression obtained is an impression of the original plus the graphite remaining on it. Were it possible to make the impression in the wax without the use of graphite, perfect detail would result, but owing to the fact that the heavy pressure used squeezes out a certain oil or fatty substance from the wax, something must be used to prevent it sticking tightly to the original; at the same time, too much non-sticking substance means loss of detail. Here is where the value of graphite comes in. A graphite is required that has the maximum of non-sticking properties, so the original may be lifted from the wax and leave a clean, sharply detailed impression. In practice, a bulky amorphous graphite is better than flake or crystalline material.

Since the pressure per square inch is bound to vary considerably at different parts of the wax case, the wax, being of a rather fluid nature, tends to flow from a point under high pressure to a point under low pressure. This flowing exposes clean, ungraphited wax to the original, which promptly sticks, and when the case is lifted the mold is spoiled by small particles of the wax adhering to the original and pulling away from the mold. This condition is met by mixing gritty substances, such as iron oxide, zinc oxide, or lampblack, with the graphite before brushing the case. If the wax is sufficiently hard and free from oil, it is necessary to use very little, if any, foreign matter.

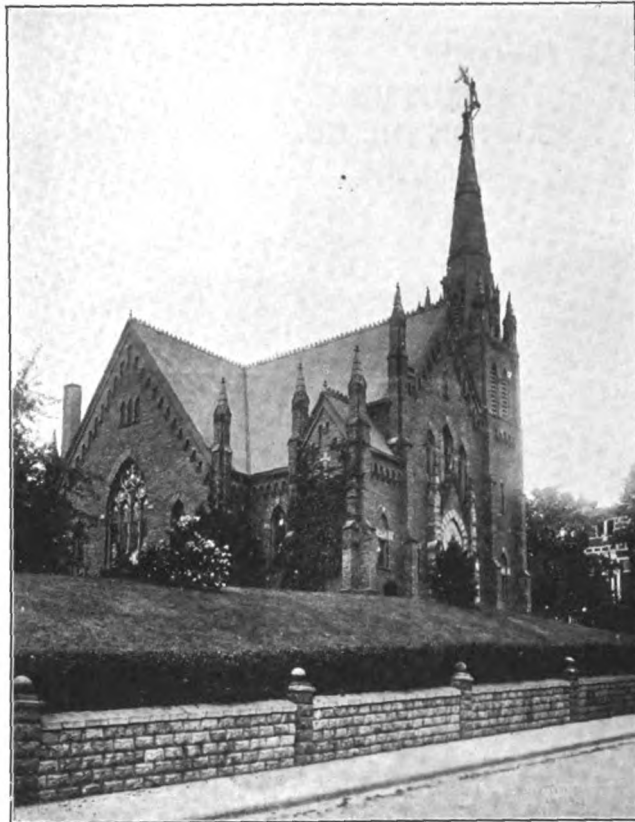
From the above it will be seen that graphite has a very prominent part in the molding process and that it must meet a number of requirements, but that high electrical conductivity is not essential.

Dixon's Nos. 643 and XXXC are our best molding leads.

◆ ◆ ◆

DISRAELI said: "The greatest secret of success in life is to be ready when your opportunity comes."

Prepare with War Savings Stamps.



St. John's P. E. Church, Logan, Ohio

THE metal-work, cornices, ridgerolls, small spires, etc., of this church were painted in 1916 with Dixon's Silica-Graphite Paint.

William O. Beede, steeple climber, stack and tank painter, of 150 North Hague Avenue, Columbus, Ohio, can be seen at the top of the steeple adjusting the cross.

Mr. Beede is well known in the West as a contractor for the painting of steeples and towers, and other types of construction, and he chooses a paint that is reliable and which gives longest service.

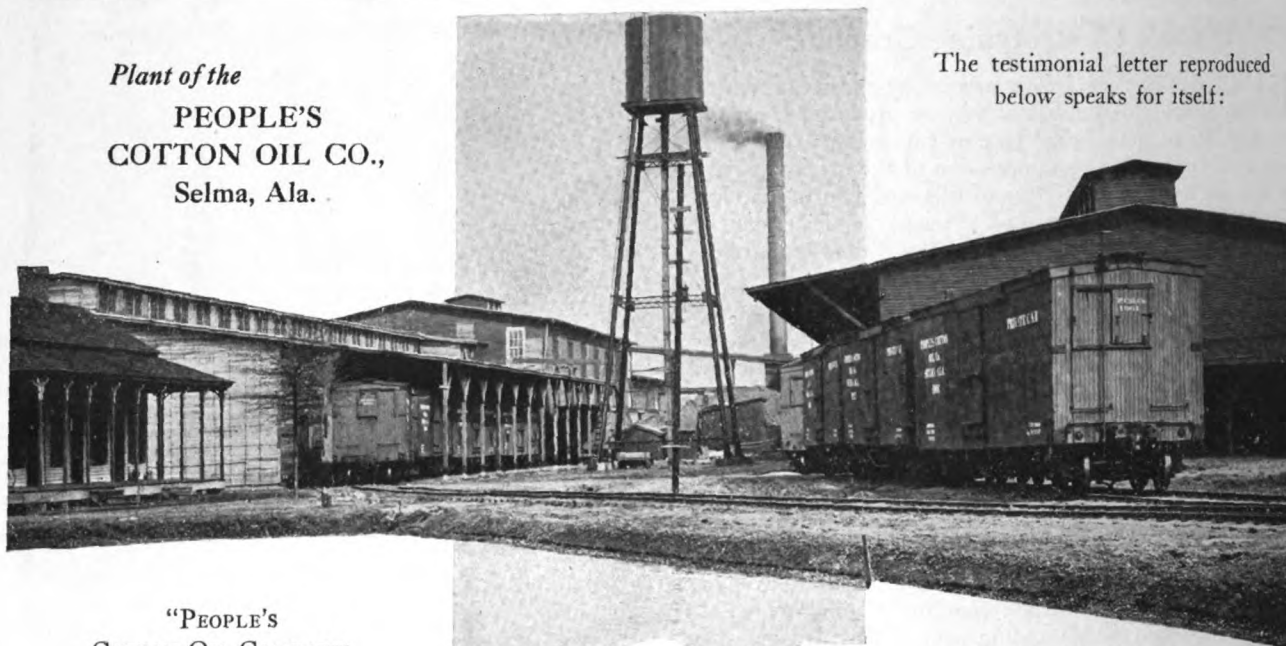
What Advertising Did in Forming a Desire and Nation-wide Habit

THE *Bulletin of Regional Associations* tells us that had any one told us thirty years ago that the American people could be induced to spend \$250,000,000 every year for chewing gum, no one would have believed it possible—in fact, we would have bet a hundred to one it could not be done. Yet it has been done, and vast fortunes have been made out of a product that merely satisfies a desire and caters to a habit.

It could not have been done in a village, a town, or a city. A nation-wide habit had to be formed before the business could become a profitable one. This was accomplished by means of good advertising and good salesmanship, backed, of course, by good management.

Any manufacturer who expects to see his business grow into a big and profitable concern must not be content to market his products in a small way. He must be a man with vision, an executive big enough not to be afraid to employ big men as sales and publicity men, and to pay big as well. His vision must rest not alone on a nation but on the entire civilized world.

Plant of the
PEOPLE'S
COTTON OIL CO.,
Selma, Ala.



The testimonial letter reproduced below speaks for itself:

"PEOPLE'S
COTTON OIL COMPANY,
SELMA, ALA.

"Our smokestack has been painted only once since 1912, which was in 1915, and Dixon's Silica-Graphite Paint was used both times. I will further say that we have never found a paint that has been more satisfactory than your paint, and we have used it for a number of years.

"The water tank shown in the picture has never been painted with anything but Dixon's Paint, and the paint has given perfect satisfaction in every instance.

Very truly yours,

PEOPLE'S COTTON OIL CO.,

June 23, 1919."

(Sd.) Geo. H. Craig, President.

The slightly larger cost per gallon of Dixon's Silica-Graphite Paint is more than offset by the service given. The cost of labor in frequent repainting makes cheap paint the most costly.

Why is Rubber called Rubber?

IT is said that away back in seventeen hundred and something, an Englishman discovered that a piece of this curious crude gum could be used to erase pencil marks. At once there was a great demand for this gum, and half-inch cubes sold as high as two to three shillings.

This would suggest they must have been given to making many errors,—quite unlike the folks in Boston, as a Bostonian once told us that rubber-tipped pencils were not needed in Boston, as Boston people made no mistakes in writing.

We find that previous to the time of our English friend, a Frenchman discovered that a piece of bread was most excellent to rub out the marks of a lead pencil.

We also find that a Frenchman possessed a most convenient eraser in the form of a piece of "caoutchouc" which could always be carried around easily. Rubbing by this method was found most satisfactory for removing the marks of a lead pencil and all other spots on paper.

The French insist on calling it "caoutchouc," while the English named it "India rubber." Although none of it came from India and although this precious substance is more largely used in a thousand other ways than rubbing out pencil marks, the name of rubber still sticks.

He "Would" on "Wood"!

WOULD you use a silica-graphite paint on wood? Dixon's Silica-Graphite Paint has been standard protective paint for steel and metal for over fifty years. Many Dixon records run over fifteen years' service. But not so many people know that Dixon's Paint gives even a longer service on wood, and is suitable as a decorative as well as a protective paint. Dixon's of course, being a graphite paint, is dark. The colors are olive green, dark red, natural (dark gray), and black. Many use a light trimming of some other



color. This trimming of course needs touching up every year or so, but Dixon's on the body of a wooden building will last many years.

The house illustrated above is one of the largest on Williams Street, Bridgeport, Conn. It is owned by Mr. Max Sclare. The house and fence are protected with Dixon's Silica-Graphite Paint, dark red. The blinds are green.

Other wooden residences in New England are painted with Dixon's Paint, the greatest paint to defy time and dampness; the most economical paint because it lasts longer. It may cost a few cents a gallon more, but it gives many years' longer life.

Twenty Years or More with the Dixon Company

THE following is a list of 100 employees who have been associated with this Company for 20 years or more of its 92 years of existence, and through whose efforts the Dixon Company has risen to its present high position in the commercial world.

The year indicated against each shows the date of entering the Company's employment.

MRS. KATE STEINHAUSER	1850	GUS SCHNEIDER	1888
JOHN LINCKS	1862	ANNA MULLEN	1889
CHRIS. VOEGLER	1864	J. B. FOOTE	1889
MATT D. EARLE	1872	MARGARET KENNY	1889
JOHN A. TRACY	1874	CHAS. J. SWIFT	1890
JOHN HEINTZ	1877	JOHN VOIGT	1890
GEO. E. LONG	1877	AUG. SWIFT	1890
GEO. SCHEPPLER	1877	MINNIE SEITZ	1891
T. B. VALLEAU	1878	FRED VOGEL	1891
LOUISE NEWTON	1878	JOHN DANNAHAUER	1891
JOHN S. POOLE	1878	PETER SPEIGEL	1891
MARIA O'BRIEN	1878	GEO. JACKSON	1891
MARY EWALD	1879	JAMES KYLE	1892
R. VAN DIEN	1880	WM. B. KAPPES	1892
WILLIAM KOESTER	1880	GEO. SMITH	1892
HARRY DAILEY	1880	HENRY RAPP	1892
EMMA RAMSEY	1880	E. C. BROWN	1893
PHIL PONNERS	1880	MICHL. GAUL	1893
MINNIE HUNT	1880	JAS. W. ROBOTOM	1893
F. ENGELBRECHT	1881	AGNES KENNY	1894
A. NULTY	1881	THOS. POLKINGHORNE	1894
JNO. RILEY	1881	AUG. ZAHN	1894
WM. BURNS	1881	DANIEL HUNT	1894
J. EHRCOT	1882	MARGARET MURPHY	1894
THERESA BERGER	1884	WM. F. SCHUERMANN	1894
FRANK STEINHAUSER	1884	CATHERINE DOYLE	1895
JOHN MEYERS	1884	C. VAN RIPER	1895
JOHN M. READY	1884	CATHERINE O'BRIEN	1895
PHIL H. MEYERS	1885	ROBT. CHAMBERS	1895
JOHN KEOUGH	1885	WM. B. ALLEN	1895
JENNIE MCGINNIS	1885	J. A. CONDIT	1896
AUG. STOLTE	1885	GEO. H. REED	1896
JOHN HESTER	1886	L. M. CHASE	1896
MARY CLARKE	1886	JOHN I. MCCOMB	1896
A. NORRIS	1887	ALICE CARROLL	1897
C. M. HARDING	1887	MARY FITZPATRICK	1897
M. McNAUGHTON	1887	NELLIE O'BRIEN	1897
CHAS. KLINE	1887	ANDREW RIDDLE	1897
SARAH REILLY	1887	GEO. STENGEL	1897
M. SINGLETON	1887	E. A. ST. JOHN	1898
WM. J. STRAIN	1887	W. G. STRINGER	1898
VAL TOP	1887	D. A. JOHNSON	1898
CATHERINE MANNERS	1887	MARY McNAMARA	1898
ANNA CAVANAGH	1888	ISAAC KEMP	1898
JOS. SOFIELD	1888	WM. A. HOUSTEN	1898
ANNIE KENNEY	1888	I. L. LEVISON	1899
B. JACKSON	1888	C. P. MUELLER	1899
A. L. HAASIS	1888	J. K. MOSES	1899
AGNES LOGAN	1888	GEO. NEIGHBOR	1899
J. SCHOVENFELDT	1888	EDW. JOHNSON	1899

"A JOB FOR EVERY STAR"

THE boys are coming back, and in accordance with the promise made to them by President George T. Smith when they entered the United States Service, they are being assigned to a position at least as good as that which they left. The following have returned up to the present:

RALPH ALFONSO, *Depot Brigade, Color and Lead Department.*
B. C. AREY, *Field Artillery, Boston District Office.*
H. W. ARMSTRONG, *Regimental Sgt.-Major, 312th Infantry, A.E.F., Crucible Department.*

LOUIS ARNOLD, *113th Infantry, A.E.F., Driver.*

EDWARD E. BACKUS, *335th Field Artillery, Crucible Factory Office.*

FRED BIRK, *3rd Chemical Battalion, Laboratory.*

G. H. BOWLEY, *Naval Reserve, Pencil Department.*

GEO. E. BROWN, *113th Infantry, Crucible Factory.*

C. A. BRUNGER, *Ordnance Sergeant, A.E.F., Auto Lub. Sales Department.*

WARREN BUDD, *S.A.T.C., Columbia University, Pencil Department.*

WILLIAM P. S. BURRELL, *Motor Transport Corps, Advertising Department.*

F. W. CASSEY, *Sergeant, 104th Field Signal Battalion, A.E.F., Accounting Department.*

JOHN CONKLIN, *113th Infantry, A.E.F., Driver.*

H. N. COONS, *Co. A, 53rd Infantry, A.E.F., Pencil Sales Department.*

H. A. CORDES, *20th Engineers, A.E.F., Crucible Factory.*

FRANK CYWINISKI, *5th Battalion, Aberdeen Proving Grounds, Crucible Factory.*

STEFEN DUBNOWSKI, *606th Engineers, Color and Lead Department.*

HARRY D. ERICKSON, *14th Engineers (Light Railway), Traffic Department.*

THOMAS EVANS, *16th Infantry Battalion, Pencil Factory.*

MICHAEL FALLON, *347th Regiment, A.E.F., Crucible Factory.*

JOHN FARGO, *334th Field Artillery, Pencil Factory.*

ANDREW FESTA, *Camp Humphreys, Color and Lead Department.*

CARMINE FROMLARA, *304th Engineers, A.E.F., Pencil Factory.*
JOSEPH GREEN, *18th Casual Aircraft Armor Company, Machinist.*

BEN GREENE, *811th Infantry, A.E.F., Grease Factory.*

TONY GREY, *153rd Depot Brigade, U.S.A., Crucible Factory.*

WM. J. HAMILTON, *Sgt.-Major, Engineers' Corps, Credit Department.*

GEORGE HEATHER, *47th Infantry, Color and Lead Factory.*

H. L. HEWSON, *Lieut., U. S. Navy, Railroad Department.*

JOSEPH HUMMILL, *Ordnance Dept., Headquarters Co., Driver.*

WILLIAM KIRCHNER, *59th Pioneer Infantry, A.E.F., Color and Lead Department.*

ANTONIO LESMAN, *1st Gas Regiment, U.S.A., Crucible Factory.*

THOMAS A. MCCRYSTAL, *U. S. Navy, Grease Factory.*

NORMAN McDONALD, *Royal Flying Corps, Brass Factory.*

WILLIAM McFADDEN, *104th Engrs.' Corps, Crucible Sales Department.*

JAMES MENTOR, *807th Infantry, A.E.F., Grease Factory.*

DANIEL MITCHELL, *310th Infantry, A.E.F., Pencil Packing Department.*

J. J. MONAHAN, *Hdq. Co., 346th Infantry, Auto. Lub. Sales Department.*

THOMAS A. MOORE, *S.A.T.C., Fordham University, Cost Accounting Department.*

DENNIS O'LEARY, *59th Pioneer Infantry, A.E.F., Pencil Factory.*

VINCENT PETRIE, *U. S. Navy, Cost Accounting Department.*

HARVEY RAGAN, *U. S. Navy, Lubricating Sales Department.*

ANDREW RODACK, *Aircraft Battery (67th), Color and Lead Department.*

JOHN O. ROLLINS, *U. S. Navy, Purchasing Department.*

LAWRENCE W. ROUSH, *1st Lieut., 78th Field Artillery, A.E.F., San Francisco Sales Office.*

EDWIN A. SELL, *Sergeant, 33rd Engineers, A.E.F., Pencil Sales Department.*

H. P. SMITH, *2nd Lieut., 3rd Field Artillery, A.E.F., Lubricant Sales Department.*

FRANK SPINELLO, *3rd Engrs.' Training Regiment, Driver.*
HENRY STEFFENS, *3rd Engrs.' Training Regiment, Cost Accounting Department.*

JOHN F. STIER, *336th Machine Gun Battalion, Pencil Factory.*

WILLIAM SULLIVAN, *347th Infantry, A.E.F., Color and Lead Department.*

A. K. SUTTON, *Machinists' Mate, Naval Aviation, Auto Lub. Sales Department.*

ANGELO VERTUCCI, *Pencil Factory.*

R. B. VINCENT, *Gas Defense Division, Philadelphia District Office.*

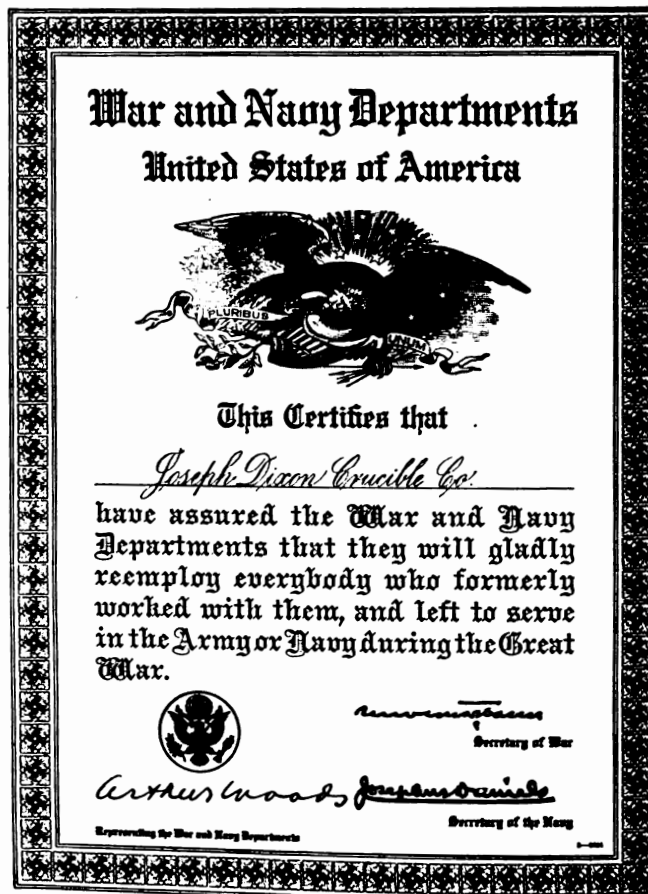
SAM VITALI, *158th Infantry, Pencil Factory.*

WM. J. WARD, *113th Infantry, Crucible Factory.*

JOSEPH WHITLEY, *113th Infantry, A.E.F., Cost Department.*

THOMAS WILSON, *47th Battalion, United States Guards, Brass Factory.*

DAVID YOUNG, *Ordnance Department, Cost Department.*



(Reproduction of original awarded by the War and Navy Departments)

The Commercial Tourist

HAIL to the knight of the business highway! Like advertising, he is always on the job, blazing the trail and creating business, and any man who creates business is a benefactor of mankind, doing more for humanity than all the preachers of isms and uplift.

Work is the first law of success, and work is the traveling man's middle cognomen. Bar none, he puts in more hours at his job than any class of men we know of. Early and late he hits the trail; he eats when he can and sleeps when he gets it.

Selling merchandise and creating trade is but part of his work. In addition he is commercial ambassador extraordinary, representing his house and its prestige.

He is a live, clean-cut, hustling business man, having taken the place of the old-time traveling salesman who took orders in proportion to the amount of booze he purchased.

Exit the old traveling man—enter the new commercial traveling representative.—*Life*.

Buying Paint

BUYING paint for the protection of metal surfaces from rust and corrosion is no longer a haphazard experiment. It is an investment worthy of serious contemplation. With the high cost of labor in mind, the cost per gallon of paint should be put aside and the cost per year of service considered.

Dixon's Silica-Graphite Paint has won a most enviable reputation for long-term service and satisfied users.

Graphite is not affected by sunlight, heat or cold, acids or alkalis. Silica is equally impervious and is to graphite paint what copper is to gold in a chain or watch-case—resists the wear of abrasion.

**International Cork Co.,
Brooklyn, N. Y.
Eight Years' Paint Service**

EIGHT years ago, the smokestack of the plant of the International Cork Company was painted with Dixon's Silica-Graphite Paint.

Recently it was painted again with the same material. This is an unusually long service, and shows what Dixon's Silica-Graphite Paint can do. It pays to use no other.

What is ten or twenty cents more a gallon when you get years more of service?

Exporting Blindly

THERE are a good many jokes told about the way Americans, at least some Americans, do export business. The latest comes to us from Brazil through the Dixon representative.

The best story told at the clubs and in business circles is about an order which was sent by one of the largest firms in São Paulo to an American manufacturer. The merchant had bought goods previously, and instead of writing on the order just how the Consular Invoice should be made out, he wrote in Portuguese:

"Queira ver declaracoes ecommendas anteriores para factura consular."

The American manufacturer did not go to the trouble of having the message translated, but copied word for word on the Consular Invoice just what the São Paulo merchant had written in Portuguese, which, when translated, means:

"Look on old invoices to see declaration for Consular Invoice."

One can well imagine the surprise and amusement this caused.

HERE is another:

A well known manufacturing firm found that for some years their Billing Department had been sending out invoices to Latin-American countries made out to

"Pedido de Garcia & Co."

or whatever the name of the customer might be. They were chagrined to discover the translation was

"Order from Garcia & Co."

The Saving 60 Per Cent.

THE statisticians assert that 60 per cent. of the American people do not attend church. Well, what does that prove?

Certainly it does not prove that the majority of the American people are not good, God-fearing people. The 40 per cent. who do go to church are sufficient to keep the churches going, and there can be no doubt that the churches influence the whole population of the country.

It is easy to make statistics, anyway. Sixty per cent. of the American people do not attend the "movies"; 60 per cent. do not go to the circus; 60 per cent. do not chew tobacco or swear. More than 60 per cent. never heard of the Bolsheviki.

Let us not be alarmed when the statisticians erupt and stick their figures in our faces. The world is getting better all the time, and it will keep on getting better.—*Los Angeles Times*.

Public Kissing Not Allowed

—Not Even on the Screen

THE *Far East* states that the police of Japan do not like to see kissing in public, and therefore film stars are not allowed to osculate on the screen. In six months up to March 1st, the police censors removed 2,350 kisses from films. Only one kiss was allowed to remain. It was a kiss granted to Columbus by Queen Isabella, and was shown in Tokio only, as the censors deleted it before permitting the photoplay "Columbus" to discover the provinces.

Three hundred and fifty-three embraces were omitted from films. The titles of 2,144 photoplays were altered by the censors, and one hundred and twenty-seven murder scenes were killed.

Most films shown in Japan are from America, and a large proportion of them originally contained a little kiss or so, showing the difference in standards between East and West.

A Good Hinge Lubricant

LINSEED oil mixed with a small amount of graphite is recommended as a lubricant for automobile door hinges and latches, which seldom receive attention in this way. Ordinary cylinder oil has a tendency to run, which is not desirable at this location because the clothes of passengers are likely to come in contact with it.—*New York Sun*.

Rim Paint for Automobile Wheels

AUTOMOBILE and truck owners should be reminded that shellac is not satisfactory for painting rims; it peels off too quickly. Graphite Paint is better for this purpose.—*N. Y. Sun*.

Use Dixon's Silica-Graphite Paint on many parts of your automobile, rims, tops, engines, mufflers, brake rods, chassis, springs, and all exposed metal parts.

A High School Principal says:

"I wish to advise you that we are now using your ELDORADO pencils in our work. I think that we will find them cheaper, and we do find that they make the work easier than the cheaper pencil that we have been using did. We are using HB, H, and 2H in our work and get our supply through the —. Thanking you for your cooperation in helping us find the right pencil, I am."



Why a Good Paint Is Cheapest in the End

A good paint, like Dixon's Silica-Graphite Paint, gives better protection for a longer period of time than ordinary paint.

That's one reason why it is "cheapest in the end."

The longer the paint lasts the less often you have to employ painters. This, perhaps, is the greatest advantage you derive from using a high grade paint. For the biggest item of expense connected with any painting job is labor.

So there is a double economy resulting from the use of Dixon's Silica-Graphite Paint: Thorough-going protection for all metal work, smokestacks included, and an enormous saving in the labor cost for painting. This paint has some remarkable records of long service to its credit. It is being used extensively in all parts of the world and in all industries.

Specify Dixon's Silica-Graphite Paint and see how much better satisfied you will be. Booklet 190-B should be in the hands of all engineers, purchasing agents, and power plant managers.

Made in JERSEY CITY, N. J., by the
JOSEPH DIXON CRUCIBLE COMPANY



Established 1827



THE DE VRIES LAMPS
 NEW YORK

Graphite

PUBLISHED BY THE
JOSEPH DIXON CRUCIBLE COMPANY

JERSEY CITY, N. J.

VOL. XXI

NOVEMBER-DECEMBER, 1919

Nos. 11-12



JOSEPH DIXON CRUCIBLE CO.

ESTABLISHED 1827 Jersey City, N.J., U.S.A. INCORPORATED 1868

**Miners, Importers and
Manufacturers of Graphite,
Plumbago, Black Lead**

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WILLIAM G. BUMSTED EDWARD L. YOUNG
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FOR DIXON'S AMERICAN GRAPHITE PENCILS, ETC.
National Paper and Type Company, 31-35 Burling Slip, N. Y.
*With Branch Houses in Mexico, Cuba, Peru, Argentine,
Uruguay, Venezuela, Porto Rico and Colombia*

CANADIAN AGENTS

FOR DIXON'S AMERICAN GRAPHITE PENCILS, ETC.
A. R. MacDougall & Co., Ltd., 468 King St., West, Toronto, Ontario, Can.

FOR ALL PRODUCTS EXCEPT DIXON'S AMERICAN GRAPHITE PENCILS
Canadian Asbestos Company, Montreal, Quebec, Can.



Scale—and the Cure

Boiler Scale cannot be prevented from forming, but there is a way of removing it easily.

The answer is to use

**DIXON'S PIONEER
BOILER GRAPHITE**

It is introduced into the boiler feed water. The particles work their way through the minute fissures of the scale, lubricate the scale, so to speak, and greatly facilitate subsequent cleaning by ordinary methods. Once clean, scale cannot again burn fast to the metal.

Both time and labor costs are cut in half, and cleaner boilers are the result.

Graphite has no taste or odor, nor is it soluble. It does not prevent the use of live steam for cooking or washing. It does not destroy gaskets, valves and fittings on steam lines.

Write for Booklet No. 190-T
and further information

Made in Jersey City, N. J., by the
JOSEPH DIXON CRUCIBLE CO.
Established 1827



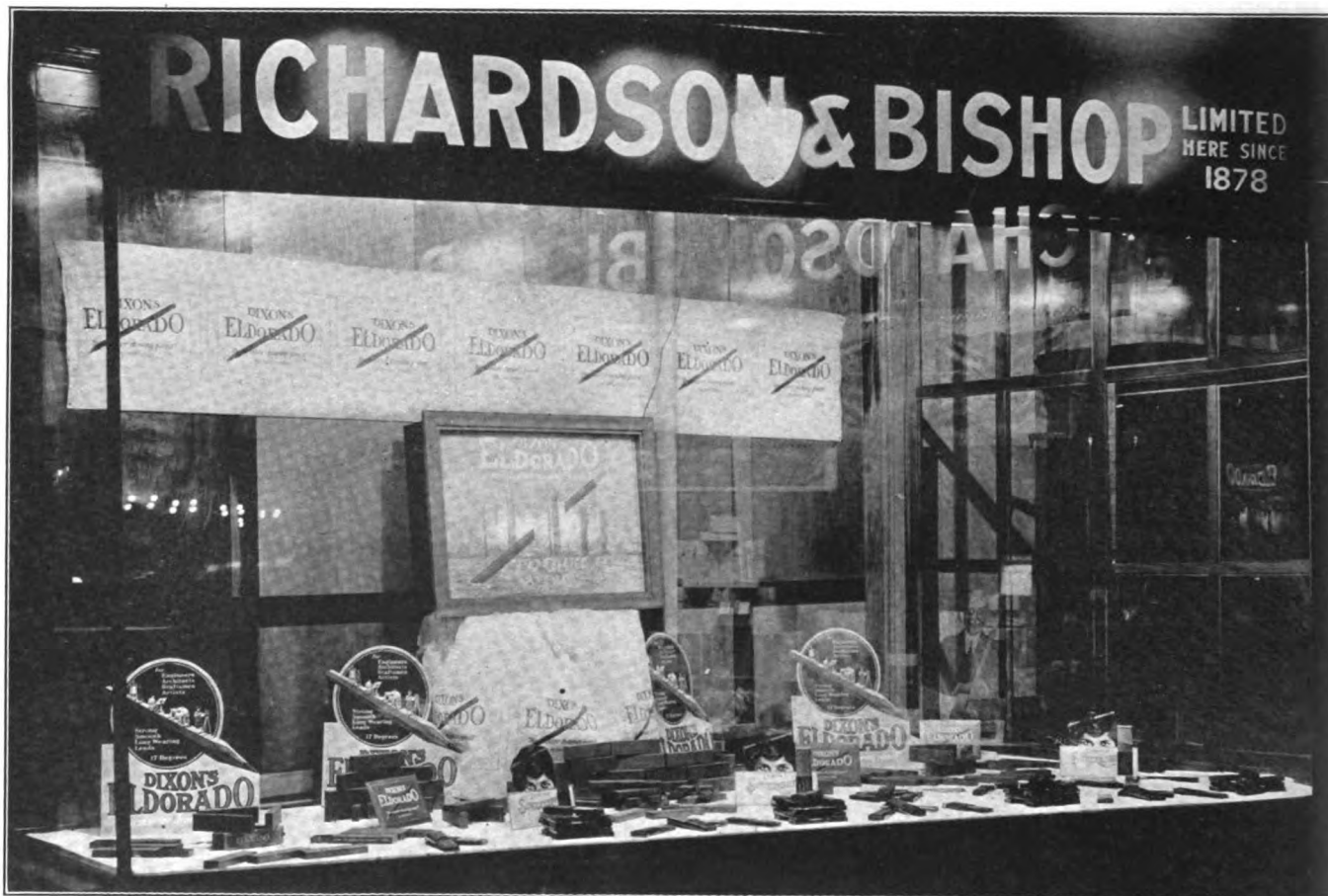
It is a matter of regret to us not to be able to fill with more promptness all of the orders placed

Eldorado Deliveries— An Explanation

with us by our customers for Dixon's ELDORADO—"the master drawing pencil." This considerably outweighs, in our mind, our gratification over the "land-slide" manner in which our business in ELDORADO pencils has grown, by reason of the genuinely favorable acceptance of the pencil by discriminating pencil users. And yet, it is because of this exceptional appreciation of the pencil that we have been unable to increase our production with sufficient rapidity to properly take care of the orders from the trade *without endangering the quality*. We have—we might say as a matter of self-interest—*insisted upon keeping the quality of the ELDORADO pencil at the same high standard* which has been responsible for its wide-spread approval. We are very glad to say, however, that our present outlook is quite favorable for a considerable increase in the production of ELDORADO pencils in the near future; and if our good friends who distribute, as well as our friends who use the pencils, will be as patient as possible with us in the matter of deliveries for a little while longer, we believe that we will, in the early part of

next year, be in a position to give them delivery service that, in the light of the present-day conditions, will be regarded by them as quite satisfactory.

Another word of explanation. We are frequently asked by the jobbers and dealers, as well as by the consumers, why we continue advertising ELDORADO pencils while we are so far over-sold. We can quite readily appreciate why such a question would be asked. Our view of the matter is this: the building of a business is a cumulative process. A large business in an article of merchandise like a lead pencil involves a knowledge of that article by a very large number of individual users. No matter how good the article might be in quality, it has no value to the man who needs it until he first knows about it. Therefore advertising, while generally recognized simply as a method of promoting the business of the maker, is really in the nature of an important service to the user. Considered in this light, and as a cumulative process, we are sure you will agree that we could not wisely discontinue our advertising because of a temporary delivery situation.



"From Far-off Manitoba"

WHAT is done to further the knowledge of Dixon's ELDORADO—"the master drawing pencil" among consumers is done to help the cause of efficiency in the Arts and Industries.

And a stationery house which, like Messrs. Richardson & Bishop, of Winnipeg, Manitoba, gives its windows to display the beautiful and attractive ELDORADO dealer helps, as shown in the reproduction which appears above, is taking its place along with other progressive, wide-awake concerns, who are aware of the opportunity as well as the responsibility in this matter.

We extend congratulations and thanks to Messrs. Richardson & Bishop on their compelling ELDORADO window display!

Glad He Lives in America

ABUSINESS man living in Pennsylvania, an Austrian by birth, came to this country about sixteen years ago as a stowaway when a boy of about fifteen. He left Austria without a penny, but has been able to take care of a nice little family and save some money too.

He has traveled extensively, lived in several States in the Union and in Mexico, and is a keen observer. Speaking of the unrest that is said to exist he said:

"I will tell you what is the matter. The blessings of America are not appreciated. If every one had gone through what I have experienced in Austria, if every one could suffer as I suffered and could see his mother work and sweat and almost kill herself to keep clothes on her children, America would be better appreciated. I came

from Austria sixteen years ago; it took me sixteen days to get over. I have never returned and I have never had the slightest desire to do so. I owe nothing to Austria—I got nothing from it but starvation. I am proud to be an American citizen. I don't want ever to see Austria again. My father and mother came over here after I did. My father in a few years lost his right arm in a mill, but the company took good care of him, giving him such work as he could do. He and mother are living down at Trenton, New Jersey, and own the house in which they live and another one. They were the only people in Austria to whom I owed anything, and after they came I ceased to care for the people or the country. America is my country."

Another Dixon Pencil Success

WE are now getting extremely gratifying reports from the trade about the effectiveness of Dixon's new indelible, Dupligrath No. 2073, with intense copying lead.

Where a signature, or a memorandum, or a report has to be reproduced many times from one copy by the impression method, Dixon's Dupligrath "Intense Copying" No. 2073 will produce a maximum number of clean-cut legible impressions.

As the demand for such a writing tool is a very extensive one, the wide-awake stationer will have an ample supply of Dixon's No. 2073 on his shelf.

Our Production Department says, "Order now."

"CORTEZ sailed the seven seas to find ELDORADO." To-day it is to be found by anybody in almost any part of the world—at least Dixon's ELDORADO.



Speaking of Champions

WHEN the Convention of the National Association of Stationers and Manufacturers met in Richmond, Virginia, during the week of October 13th, the Head of the Dixon Pencil Department, Mr. Herman Price, had a certain enviable reputation as a business man. Mr. Price, however, not content with his success in the business world, on this occasion extended his efforts in another direction, and entered the Golf tournament.

How well he succeeded in this sphere is shown by the beautiful cup reproduced at the head of this article. Our gladness at Mr. Price's winning the cup was tempered by some regret that he could not have won it a little bit earlier in the year, when, in celebration of his success, it might have served to hold something besides congratulations.

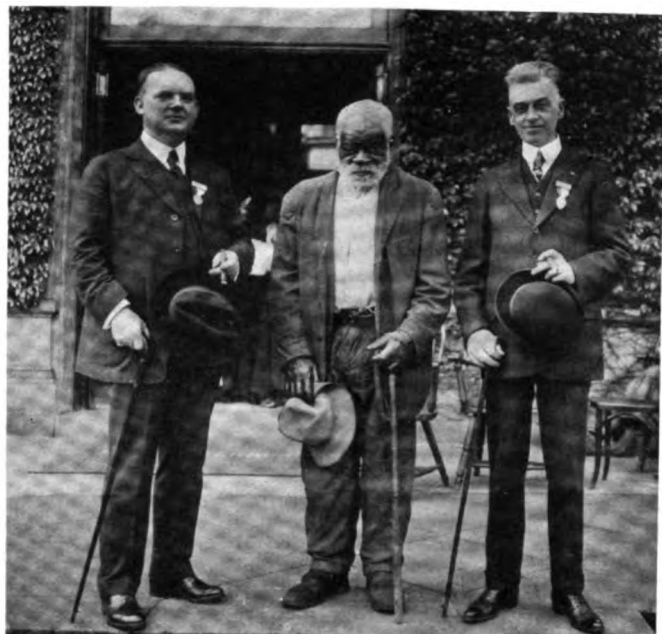
Paint Galvanized Iron

EVEN galvanized iron begins to show corrosion from rust and should be painted every two or three years, says the *American Paint & Oil Dealer*.

Examine your galvanized iron roof, sheds, docks, garage, and other buildings. You will find pitting where drops of water, impregnated with acids from the city atmosphere, have lain. But what's the good of painting every two or three years and losing all that material and terribly high labor charges?

Why not paint with two coats of Dixon's Silica-Graphite Paint and be done with the job for many years? Many Dixon records run as high as fifteen years and more. Don't wait for costs to come down. Do it now—to-day. Rust costs more than paint.

The gospel of the future will NOT be "shorter hours and increase of pay," but WILL be "greater industry, efficiency, and production for everybody."



The "Mason and Dixon Line"

THE above photograph was taken during the Convention of the National Association of Stationers and Manufacturers at Richmond, Va.

It well represents the very intimate relationship between the North and South as well as the "Mason and Dixon Line." The handsome slim gentleman on the right is Senator Allen, owner and head of Fielder and Allen of Atlanta, Ga., and who undoubtedly will be the next Governor of Georgia. The other gentleman is, as you will note, J. H. Schermerhorn, Vice-President of the Joseph Dixon Crucible Company.

Mr. Allen is a Mason and of course Mr. Schermerhorn is a Dixon, so the ninety-nine-year-old colored man must be the line.

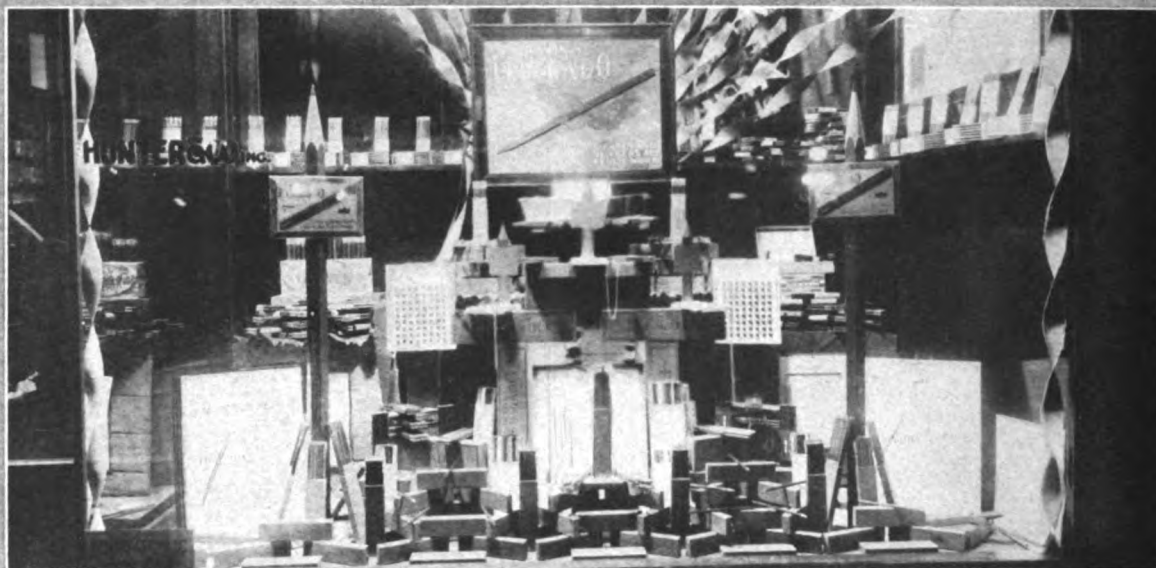


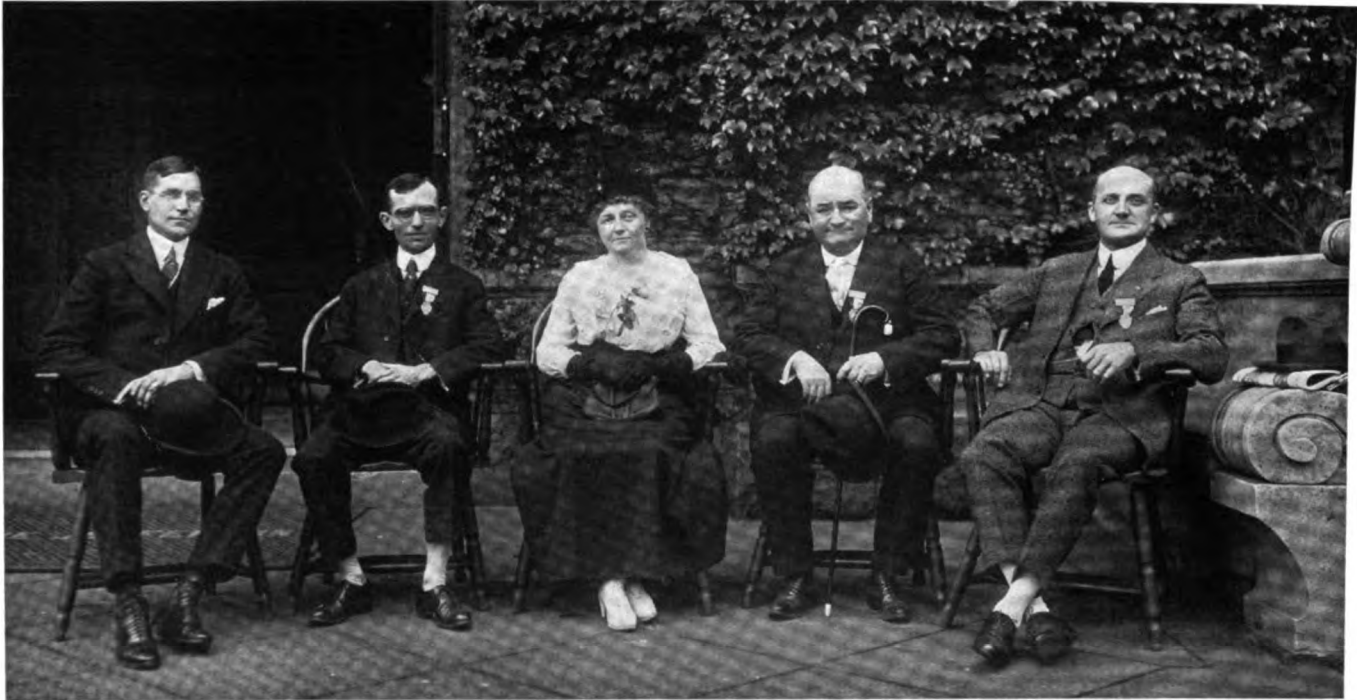
Two Good Rotarians

THE smiling countenances which look out of the above photograph are, as the gentle reader may well believe, the signs of success.

The gentleman to the left is Mr. A. B. Pembroke, of the Pembroke Stationery Company, of Salt Lake City, Utah, and to the right, Mr. Jack Lewis, our genial District Representative, whose office is in Atlanta, Ga.

Mr. Pembroke was a general checker during the election at the convention of the International Rotary Clubs, held some time ago in Salt Lake City, Utah. According to Mr. Lewis' modest account of the affair, his candidate was elected President of the International Rotary Clubs.





National Stationers' Convention and Dixon Window Displays

THE annual convention of the National Association of Stationers and Manufacturers, which was held in Richmond, Va., during the week beginning October 13, was the most largely attended convention ever held by this organization.

As is usual during these conventions, the Dixon pencils, crayons, erasers, and penholders were very much in evidence in the windows of the local stationers, as is quite clearly indicated by the photographs of Dixon window displays reproduced on the opposite page. The upper display was made by Hunter & Company, the middle display by the Southern Stamp & Stationery Company, and the lower display by the Virginia Stationery Company.

Our Mr. A. J. Pfaff rendered a great deal of assistance to the stationers in arranging these displays, and he felt very much rewarded for his efforts by the numerous complimentary expressions that were made by stationers attending the convention who took occasion to visit the local stationery stores. It is, of course, impossible for a photograph to do justice to a window display of merchandise involving such a small unit as the lead pencil, and much of the carefully carried out detail and artistic arrangement must be left to the imagination. After Mr. Pfaff finished his work on the window displays, his real activities on the occasion of the convention had hardly begun, as he was on the alert at all times to add to the comforts of those who went to Richmond, and to help generally in the success of the convention.

Mr. W. G. Stringer, our Philadelphia District Representative, was highly complimented on the floor of the convention for his record-breaking performance in securing new members for the National Association of Stationers and Manufacturers during the last two years.

Mr. Schermerhorn spent the greater part of his time in the more serious business of the convention, involving business sessions and committee conferences.

Automobiling with his friends was the favorite pastime of Mr. Ready, who seemed to be even more enthusiastic over the attractive and historical features of the city of Richmond than the Richmond people themselves, and we agree that he had ample justification.

Mr. Price stole away on a number of occasions to the golf links, and we presume it was the preliminary practice that he availed himself of that enabled him to win the beautiful trophy donated by the Chicago Stationers' Association to the winner of the prize for the lowest net score.

Dixon Men as Background for Mrs. William G. Whittemore

DURING the National Stationers' Convention in Richmond, Mr. C. H. Everly, Eastern Manager for Office Appliances, kept one of the local camera men quite busy taking photographs of various groups. It is through Mr. Everly's courtesy that we are enabled to present the above reproduction of a photograph of Dixon men who attended the convention, with Mrs. William G. Whittemore sitting by proxy for the one missing Dixon "conventioner," namely, Mr. J. H. Schermerhorn, our Vice-President.

At the time the "sittings" were being arranged, Mr. Schermerhorn, who was engaged in a committee conference, could not be located. Mr. Price and Mr. Ready maintained that they would rather "pose for their pictures" seated alongside a nice lady anyhow, and they proceeded to persuade Mrs. Whittemore, considerably in opposition to her natural modesty, to lend a little real human interest to the photograph.

The Dixon men are now all agreed that the only purpose they serve in the picture is to form an effective background by contrast for Mrs. Whittemore.

The group, reading from left to right, includes: Mr. W. G. Stringer, District Representative, in charge of our Philadelphia office; Mr. Herman Price, Manager of the Pencil Department at headquarters; Mrs. Whittemore; Mr. John M. Ready, District Representative, in charge of our New York office, and Mr. A. J. Pfaff, Special Representative of the Pencil Department at headquarters.

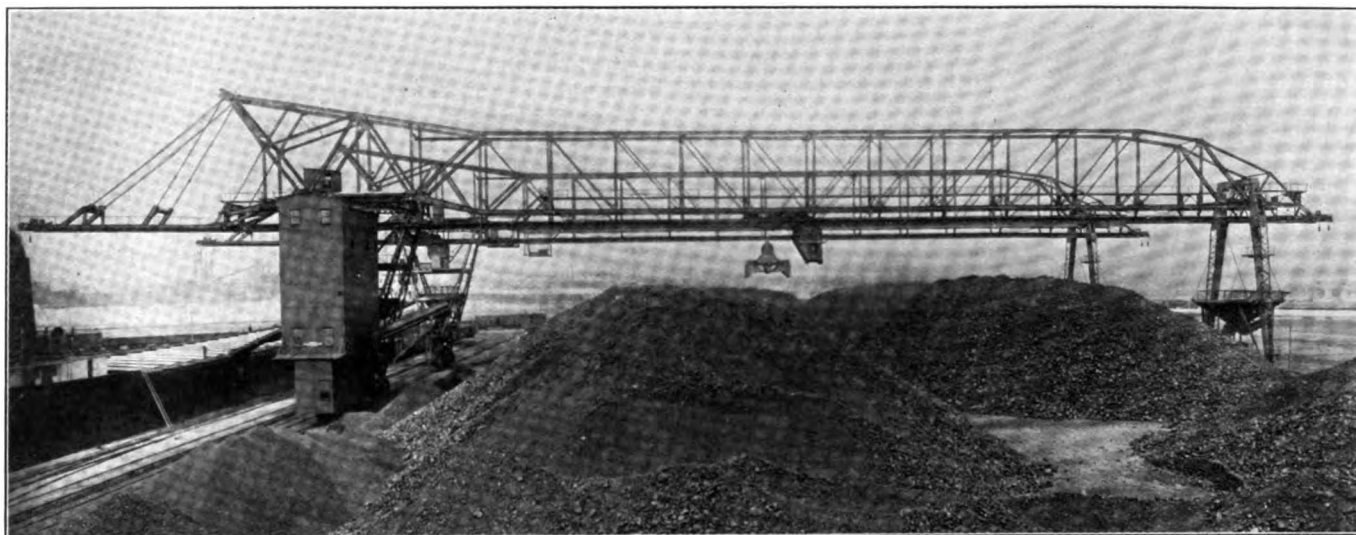
With the Dixon Company Twenty Years or More—Revised List

THE following is a *revised* list of 117 employees who have been associated with this Company for 20 years or more of its 92 years of existence, and through whose efforts the Dixon Company has risen to its present high position in the commercial world. The year indicated against each shows the date of entering the Company's employment.

MRS. KATE STEINHAUSER..	1850	SARAH REILLY	1887	FRED C. FUESS	1894
JOHN LINCKS	1862	C. M. HARDING	1887	THOMAS POLKINGHORNE ..	1894
CHRISTOPHER VOEGLER ..	1864	MARIE SINGLETON	1887	AUGUST ZAHN	1894
MATTHIAS D. EARL	1872	WM. J. STRAIN	1887	MARGARET MURPHY	1894
JOHN WAGNER	1874	V. TOPP	1887	WILLIAM F. SCHUERMANN..	1894
JOHN A. TRACY	1874	G. SCHNEIDER	1888	CHARLES VAN RIPER	1895
BELLA KELLY	1875	J. SOFIELD	1888	ROBERT L. CHAMBERS	1895
JOHN HEINTZ	1877	ANNIE KENNEY	1888	CATHERINE O'BRIEN	1895
GEORGE SCHEPPLER	1877	BOULTON JACKSON	1888	JOHN A. CONDIT	1896
GEO. E. LONG	1877	AGNES LOGAN	1888	G. H. REED	1896
THEO. B. VALLEAU	1878	JACOB SCHOENFELDT	1888	L. M. CHASE	1896
JOHN S. POOLE	1878	ANNA E. CAVANAGH	1888	JOHN I. McCOMB	1896
MARIA O'BRIEN	1878	A. L. HAASIS	1889	ALBERT OSTHOFF	1897
LOUISE NEWTON	1878	JOHN J. LINEHAN	1889	MARY FITZPATRICK	1897
MARY EWALD	1879	ANNA MULLEN	1889	ALICE CARROLL	1897
HARRY DAILEY	1880	JOHN B. FOOTE	1889	ELIZABETH LYING	1897
WILLIAM KOESTER	1880	MARGARET KENNY	1889	ANDREW RIDDELL	1897
R. VAN DIEN	1880	CHARLES J. SWIFT	1890	MARY O'KEEFE	1897
EMMA T. RAMSAY	1880	JOHN VOIGT	1890	D. A. JOHNSON	1897
PHILIP PFONNER	1880	ANNA BRUNNING	1890	CARL SCHUMACHER	1898
MINNIE HUNT	1880	J. W. ROBOTOM	1891	ISAAC KEMP	1898
F. ENGELBRECHT	1881	MINNIE SEITZ	1891	KONRAD BECKER	1898
ALBERT NOLTE	1881	FREDERICK VOGEL	1891	EDWARD RAMSEY	1898
WILLIAM BURNS	1881	JOHN DAUNAHAUER	1891	KATE KNERR	1898
JAMES H. LAPSLEY	1882	PETER SPEIGEL	1891	W. G. STRINGER	1898
ANNA E. SINGLETON	1882	GEORGE H. JACKSON	1891	E. A. ST. JOHN	1898
THERESA BERGER	1882	CARL NEGREY	1891	EDW. JOHNSON	1899
FRANK J. STEINHAUSER ..	1885	JACOB SCHWENK	1892	GEORGE NEIGHBOR	1899
JOHN M. READY	1885	JACOB WAHL	1892	PETER GASSER	1899
P. H. MEYERS	1885	JAMES KYLE	1892	PORTER SPICER	1899
JOHN KEOUGH	1885	WILLIAM B. KAPPES	1892	I. L. LEVISON	1899
FRANK STUCKEY	1885	GEORGE SMITH	1892	C. P. MUELLER	1899
JENNIE McGUINNESS	1885	HENRY RAPPE	1892	ANDREW SHEI	1899
HENRY A. HEILMAN	1886	JOHN DISTLER	1892	ADAM HOFFMAN	1899
JOHN HEATER	1886	MICHAEL GAUL	1893	J. K. MOSES	1899
M. McNAUGHTON	1887	F. DOOLITTLE	1893	LEWIS BARTLETT	1899
A. NORRIS	1887	E. C. BROWN	1893	W. A. HOUSTEN	1899
CATHERINE MANNING	1887	PATRICK H. McTANNEY ..	1893	GEO. DOWDELL	1899
W. B. ALLEN	1887	DANIEL HUNT	1894	MARGARET LYNCH	1899

Résumé

One	has	been with us	69 years	Three	have been with us	38 years	Seven	have been with us	27 years		
One	"	"	57 "	Three	"	"	37 "	Four	"	"	26 "
One	"	"	55 "	One	has	"	35 "	Six	"	"	25 "
One	"	"	47 "	Five	have	"	34 "	Three	"	"	24 "
Two	have	"	45 "	Two	"	"	33 "	Four	"	"	23 "
One	has	"	44 "	Nine	"	"	32 "	Seven	"	"	22 "
Three	have	"	42 "	Seven	"	"	31 "	Seven	"	"	21 "
Four	"	"	41 "	Five	"	"	30 "	Thirteen	"	"	20 "
One	has	"	40 "	Three	"	"	29 "				
Six	have	"	39 "	Seven	"	"	28 "				



Coal-handling Bridges of the Island Creek Coal Company, Duluth, Minn.

A. W. FAY, superintendent of the above company, is well known as a thorough investigator of final costs of upkeep, and an able superintendent in the coal-handling business, a business which calls for economical and expert management.

The wear and the weather attacks on such a plant are of the heaviest kind. Mr. Fay chose Dixon's Silica-Graphite Paint for the paint protection of the bridges illustrated above, which choice in itself is a high recommendation.

Dixon's Paint is rendering similar service on equipment owned by other coal concerns.

The economical features about Dixon's Silica-Graphite Paint are several:

First: It lasts longer and is lowest in cost per year.

Second: It is invariably of highest quality only, which is a standard guarantee of quality and confidence.

Third: It is an American product throughout; has maintained uniform reputation and service for over fifty years. It is manufactured by those who thoroughly know the customer's need, the material and the service the paint will give. This is no day to waste or to experiment.

We invite correspondence about your paint needs. Paint to-day, less rust arrive to-morrow.

Oakum Plant

FIFTY years ago, and perhaps not so long ago as that, the practice was, when a youngster had the mumps, to get a piece of old tarred rope that had been discarded from some ship and pick it to pieces. Tarred rope so picked was known as oakum, and this oakum was wet with vinegar and applied to the youngster's jaws where the mumps had taken up a more or less extended residence.

Oakum is used for caulking vessels and for other purposes, and it may be of interest to the readers of GRAPHITE to know that the largest oakum plant in the world is located in Jersey City, and occupies a ground area of five acres with twenty-one buildings. The plant has a capacity of twenty tons of oakum a day.

When the Shipping Board entered upon its huge wood shipbuilding program, it was found that each ship would

require 800 bales of oakum for caulking, or a total of 800,000 bales in one year's time.

The plant is known as the George Stratford Oakum Company, and has a long record for achievement. It was organized in 1860.

Oakum, according to the encyclopedia definition, is a preparation of tarred fiber used in shipbuilding for caulking or packing joints of timbers in wooden vessels and the deck planking of iron and steel ships.

The encyclopedia makes no mention whatever of oakum for the cure of mumps, but the writer of this well remembers having both of his jaws tied up in a wad of it.

The Associated Purchasing Agents

IN October, 1913, there met at the Hotel McAlpin, New York City, seven purchasing agents, one of whom was Mr. John I. McComb, purchasing agent of the Joseph Dixon Crucible Company.

The result of this meeting was the starting of the association known as the Purchasing Agents' Association of New York.

In December of the same year the second meeting was held, with an attendance of about one hundred purchasing agents.

At the present time there are twenty-nine Purchasing Agents' Associations, extending from New York to California, including Canada. All of these twenty-nine Purchasing Agents' Associations are members of the National Association of Purchasing Agents. The National Association of Purchasing Agents was formed shortly after the Purchasing Agents' Association of New York was started. At the present time the total membership is three thousand, and the National Association of Purchasing Agents expect to increase this membership to eight thousand by one year hence.

The fourth annual convention of the National Association of Purchasing Agents was held in Philadelphia, September 22, 23, and 24, 1919. There was an attendance of about fifteen hundred members, representing twenty-eight of the twenty-nine associations.

John I. McComb was the first Treasurer of the Purchasing Agents' Association of New York and National Association of Purchasing Agents.



Mr. William Lewis, of Sydney, Australia

THE Australian sales agency for Dixon's Pencils, Crayons, Erasers, and Penholders was recently given to Mr. Wm. Lewis, of Sydney, Australia, in whose capable and experienced hands we look for a wide extension of the knowledge and sale of the Dixon Pencil Line in that great country.

Research Laboratory of the Joseph Dixon Crucible Co.

THE superstitious folk of the middle ages experienced a wonderful feeling of romance from the magic of their alchemists and wizards—a feeling based on the mystery with which their activities were shrouded. Yet absurd as were their claims, the alchemists undoubtedly were the fore-runners of the modern scientific chemists.

Nowadays schools, books, and magazines have dispelled the old cloud of mystification from the work of scientists, and the results of research are felt alike by the farmer, the manufacturer, the housewife, and others. But who can step into a laboratory without feeling that the little blue flames, the little but loudly roaring furnaces, the crucibles and tiny cauldrons, the wicked-looking bottles, the strange and demonlike odors, are very suggestive of the days of witchcraft and conjuring?

There is such a place of interest and study to be found in the newly established Research Laboratory of the Joseph Dixon Crucible Company. It is located close to the works but far enough away to avoid the noise and dust and be free

from the vibrations of the factories which are so likely to disturb the accuracy of the delicate instruments.

The building is a large twenty-room house, the old-time manse of a Scotch Presbyterian church wherein no cushions or heat or music were permitted, so we are reasonably sure that Old Nick was long ago exorcised never to return.

In this very much larger and more complete laboratory, we shall be far better able to analyze all our clays, graphites, and other materials that enter into the Dixon crucibles, pencils, paints, and the thousand and one other things made by the Dixon Company. We shall also be able to make microphotographs of all materials that require microscopic study. In other words, we shall expect to have what we have started out to have: a complete Research Laboratory wherein our staff of chemists will be able to study and to produce results of great value to the Dixon Company and to its world-wide clientele.

The 1919 Racing Season

TWO world's records and a long list of first places comprise the remarkable record of victories which Dixon's Lubricants have made in automobile races during the 1919 season. Both world records were made by Gaston Chevrolet on the Sheepshead Bay track, when he won a 100-mile derby in 54 minutes and 17.8 seconds and later in the season drove 150 miles in 1 hour, 22 minutes, and 34½ seconds.

Chevrolet's success was duplicated by many other leading drivers. Tommy Milton had an especially successful season with Dixon's, as also did Joe Boyer, who won a number of times with his Dixon-lubricated Frontenac.

In practically every big race of the season, Dixon's Lubricants were used on the winning cars. One of the early triple victories for Dixon was in the Uniontown races on May 17. Tommy Milton won this race, Louis Chevrolet finished second, and Ralph Mulford finished third. All used Dixon's Lubricants throughout their respective cars.

Of the thirty-seven entries in the 500-mile Sweepstakes at Indianapolis on May 31, thirty-four of the cars used Dixon's Lubricants. Of the first ten cars to finish, seven were lubricated throughout with Dixon's and the other three used Dixon's Motor Graphite.

All of the winners in the International Sweepstakes races at Sheepshead Bay on June 14 were Dixon-lubricated cars. On August 23, in the National Road Race at Elgin, Illinois, Tommy Milton finished first in his Dixon-lubricated Duesenberg, followed by Roscoe Sarles, Schillo, and Ira Vail, all of whom were using Dixon's Lubricants.

Joe Boyer, Roscoe Sarles, Louis Chevrolet, and Ralph Mulford took the first four places in the 225-mile autumn classic at the Uniontown Speedway September 1. All of the winning cars in that race were lubricated exclusively with Dixon's. Three of them made the 225 miles without a stop, a remarkable lubrication record.

The final tribute was paid Dixon's Lubricants in the 250-mile World Series Sweepstakes at Cincinnati on October 12, when Joe Boyer drove his Frontenac across the tape in first place, making the creditable time of 101.69 miles per hour. Art Klein, Kurt Hitke, and Dave Lewis took the next three places. All of the winners were using Dixon's Lubricants throughout their cars.

For many years the world's leading automobile racing drivers have depended on Dixon's Lubricants. Their choice, when not only their success but often their very lives depend on the perfect lubrication of their cars, is of significance for motorists the world over.

Metal Roofs

WHEN the Dixon Company gets a testimonial as emphatic as the following from one of the best known wholesale and retail dealers in the Southwest, we conclude that if there are complaints about tin roofs, it is the quality of the tin or improper painting that is at fault, and not Dixon's Silica-Graphite Paint, which for many years has been a standard protector for metal roofs:

LITTLE ROCK, ARK., Sept. 23, 1919.

"I have your letter in regard to increase in price of Dixon's Silica-Graphite Paint. Please ship my order of the 19th. I want this paint for a roof that has been painted with Dixon's Paint for 25 years, and this roof is in as good a condition as when first put on the building.

"I would pay twice the money if necessary, as there is no paint for tin roofs better than yours."

(Signed) J. W. MAST.

How to Outwit the Auto Thief

AMONG a number of ways mentioned by *Collier's*, we find the following:

"Bore a hole at a specified distance from the front of the car's frame; fill with graphite and paint over. A knife will easily locate the mark again—but remember where you put it."

A True Statement

GOVERNOR LOWDEN of Illinois recently said:

"For years we looked upon the Socialist party as visionary, not destructive. The party now has thrown off all disguise. It sought in every way to obstruct this Government in the prosecution of the war. Their propaganda must be met with propaganda of our own. If the ownership of property is to become a crime, if education shall be banished and religion dethroned, if the home shall be broken up, then the future of the worker will be dark. I know it is becoming unpopular to speak of property, but there never was a civilization that did not have its beginning in the recognition of man's right to the product of his own labor, whether of the hand or brain. Without the incentive of private property civilization would languish and die."—*Manufacturers' Record*.

Embargo on Exports

SPEAKING at the Luncheon Conference of the American Manufacturers' Export Association, Senator Walter E. Edge, of New Jersey, declared that he was absolutely opposed to an embargo on exports except perhaps in individual cases, and that in his opinion the time had come when this country could not do too much business with all the countries of the world, if satisfactory credit facilities could be arranged.

The Luncheon Conference was attended by about 500 representative manufacturers, and was presided over by the President of the Association, Mr. George E. Smith, who is also President of the Royal Typewriter Company.

The Harbor of San Francisco

READERS of GRAPHITE who live round about New York, and perhaps those who live round about Boston, may not know that San Francisco has the largest landlocked harbor in the world.

In area the Bay of San Francisco covers 420 square miles, and has a shore-line, exclusive of navigable inlets, of 100 miles. The City and County (consolidated) of San Francisco has a water frontage on the bay of ten miles.

The San Francisco harbor front is owned by the State of California. The new docks and wharves are being built under a \$10,000,000 state bond issue, the interest on same and all sinking and redemption funds being paid out of the harbor revenues.

Deep water is found at all the docks and wharves on the San Francisco water front. Ten fathoms (60 feet) is the average depth in the bay, so that safe anchorages are obtainable at all times.

Divide the First Cost

of Dixon's Silica-Graphite Paint by the many long years of service, and then you will have the key to its economy and increasing sales among intelligent engineers, owners of industrial plants, water companies, and others who make figures control prejudice.

Records covering a period of over fifty years prove that, for long service, Dixon's Silica-Graphite Paint is without an equal. It is sold on its performance and not lower price per gallon. Please remember the cost of labor in frequent repainting makes cheap paints the most costly. If interested write for Booklet 190-B and convincing records.

Paints and Painting

AS a general proposition all paints are good; some are better than others, and for cutting down the necessity of frequent repainting and for economy, Dixon's Silica-Graphite Paint is said by users to be the best.

A paint to be the best for protecting all outside surfaces for the longest time must not be affected by atmospheric disturbances, such as hail, rain, snow, wind and dust storms. It must stand much abrasive action. It must resist heat and cold, expansion and contraction.

So far as the knowledge of man goes—and it goes back for over fifty years—Dixon's Silica-Graphite Paint has proven itself the best; the one that has been proven best by tests north, south, east, and west, and in all parts of the world.

Those who are interested can have full information by addressing our Paint Department, No. 190-B.

Hard Winter Predicted

THE Dixon Graphite mines are located at Ticonderoga and at Graphite, New York. Word comes to us that the natives up there are predicting a hard winter. They say it will be the toughest winter in ten years, that snow and cold will come early and stay late. Their belief is based on the following:

Corn husks are thicker than usual.

The woodchucks are said to be burrowing deeper than ever.

The plumage of birds is heavier than last year.

Hickory nuts are more plentiful than usual, which indicates that nature has provided well for the little squirrels.

The unusual amount of rain this summer is another indication, as rainy summers are always followed by snowy winters.

Reconstruction Period

OUR wine glasses make lovely vases
For a rose with a bit of green vine,
We've planted a palm in our punch-bowl
And a maidenhair fern in our stein.

Our buffet is filled with bright nose-gays,
I wonder why father looks sad?

Our demijohn's gone to the milk-man,
No doubt Pollyanna is glad!

C. B. ORWIG
in *Los Angeles Times*.

DIXON

THE **DIXON** LINE

Announcing the completion of the DIXON LINE of

Dupligrath Indelible Copying Pencils

which now comprise

HARD DIXON'S DUPLIGRAPH COPYING - 2070

the hard lead, yellow finish DUPLIGRAPH

Nos. 2070 plain
2070-MP with gilt mouthpiece
2070-P with point protector

SOFT DIXON'S DUPLIGRAPH COPYING - 2071

the soft lead, lavender finish DUPLIGRAPH

Nos. 2071 plain
2071-MP with gilt mouthpiece
2071-P with point protector

Dixon's Dupligrath INTENSE COPYING NO 2073

the intense copying lead, purple finish DUPLIGRAPH

No. 2073 — unrivaled for duplicator work.

A different finish for each lead.

A lead for every indelible copying demand.

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